

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Sin J. Lee Examiner #: 76060 Date: 11-15-05
 Art Unit: 1752 Phone Number 30 2-1333 Serial Number: 10/809,323
 Mail Box and Bldg/Room Location: 9D60 Results Format Preferred (circle): PAPER DISK E-MAIL
(Rem.)

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Plz. See Bib.

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Plz. Search for a composition

that contains ① an Infrared absorber (A) of

formula (1) in Cl. # 2

② Radical generator (or Photoinitiator) (compound that generates a radical upon heating or irradiating)

③ a Polymerizable compound.

SCIENTIFIC REFERENCE BR
Sci & Tech Inf. Ctr

NOV 16 RECD

Pat. & T.M. Office

STAFF USE ONLY

Searcher: Wether
 Searcher Phone #: _____
 Searcher Location: _____
 Date Searcher Picked Up: 11/16/05
 Date Completed: 11/17/05
 Searcher Prep & Review Time: 120
 Clerical Prep Time: 30
 Online Time: 120

Type of Search	Vendors and cost where applicable
NA Sequence (#)	STN <u>6 675 . 81</u>
AA Sequence (#)	Dialog _____
Structure (#)	Questel/Orbit _____
Bibliographic	Dr. Link _____
Litigation	Lexis/Nexis _____
Fulltext	Sequence Systems _____
Patent Family	WWW/Internet _____
Other	Other (specify) _____

IN THE CLAIMS:

1. (Currently Amended) A presensitized plate composed comprised of a support having thereon an image recording layer which includes:

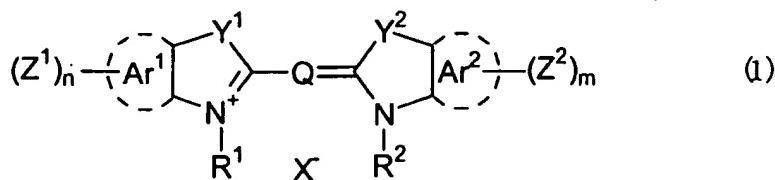
an infrared absorber (A) that is a cyanine dye having at least one fused ring composed comprised of a nitrogen-containing heterocycle in combination with an aromatic ring or a second heterocycle, and having on the aromatic ring or second heterocycle an electron-withdrawing group or a heavy atom-containing group,

a radical generator (B), and

a radical-polymerizable compound (C),

and which is removable with printing ink and/or dampening water.

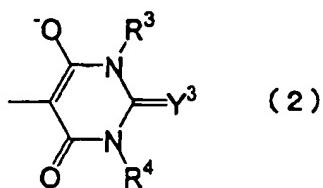
2. (Currently Amended) The presensitized plate according to claim 1, wherein the infrared absorber (A) is a compound of formula (1) below [.] :



(In wherein in the formula (1), R¹ and R² are each

independently a hydrocarbon group of up to 20 carbons which may be substituted [.]_L Ar¹ and Ar² are each independently an aromatic hydrocarbon group or a heterocyclic group which may be substituted [.]_L Y¹ and Y² are each independently a sulfur atom, an oxygen atom, a selenium atom, a dialkylmethylene group of up to 12 carbons or a -CH=CH- group [.]_L Z¹ and Z² are each substituents selected from the group consisting of hydrocarbon groups, oxy groups, electron-withdrawing groups and heavy atom-containing groups, at least one of Z¹ and Z² being an electron-withdrawing group or a heavy atom-containing group —The L wherein the letters n and m each represent 0 or a higher integer, with the proviso that the sum of n and m is at least 1 [.]_L

Q is a pentamethine group or a heptamethine group which may be substituted with a member selected from the group consisting of alkoxy, aryloxy, alkylthio, arylthio, dialkylamino, diarylamino, halogen atoms, alkyl, aralkyl, cycloalkyl, aryl, oxy, iminium bases and substituents of formula (2) below; or may have a cyclohexene, cyclopentene or cyclobutene ring containing three connected methine chains [.]_L



In wherein in the formula (2), R³ and R⁴ are each independently

a hydrogen atom, an alkyl of 1 to 8 carbons or an aryl of 6 to 10 carbons; and Y³ is an oxygen atom or a sulfur atom [[.]])], and X⁻ is a counteranion that exists in cases where charge neutralization is required. [()]])

3. (Cancelled)

4. (Original) The presensitized plate according to claim 1, wherein the support has thereon, in order, an undercoat layer containing a compound having a polymerizable group on the molecule, and the image recording layer.

5. (Currently Amended) The presensitized plate according to claim 3, A presensitized plate comprised of a support having thereon an image recording layer which includes:

an infrared absorber (A) having an oxidation potential of at most 0.45 V (vs. SCE),

a radical generator (B), and

a radical-polymerizable compound (C),

and which is removable with printing ink and/or dampening water, wherein the support has thereon, in order, an undercoat layer containing a compound having a polymerizable group on the molecule, and the image recording layer.

6. (Original) The presensitized plate according to claim 4, wherein the compound having a polymerizable group on the



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Bib Data Sheet

CONFIRMATION NO. 1240

SERIAL NUMBER 10/809,323	FILING DATE 03/26/2004	CLASS 430	GROUP ART UNIT 1752	ATTORNEY DOCKET NO. 1110-0318P
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APPLICANTS

Tomoyoshi Mitsumoto, Shizuoka, JAPAN;

Ippei Nakamura, Shizuoka, JAPAN;

** CONTINUING DATA *****

None SJL

** FOREIGN APPLICATIONS *****

JAPAN 2003-085166 03/26/2003 S.J L
 JAPAN 2003-327659 09/19/2003
 JAPAN 2003-341197 09/30/2003

IF REQUIRED, FOREIGN FILING LICENSE GRANTED

** 06/08/2004

Foreign Priority claimed 35 USC 119 (a-d) conditions met Verified and Acknowledged Examiner's Signature	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input checked="" type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> Met after Allowance Initials SJL	STATE OR COUNTRY JAPAN	SHEETS DRAWING 0	TOTAL CLAIMS 17	INDEPENDENT CLAIMS 2
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ADDRESS

02292
 BIRCH STEWART KOLASCH & BIRCH
 PO BOX 747
 FALLS CHURCH , VA
 22040-0747

TITLE

Lithographic printing method and presensitized plate

FILING FEE	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT	<input type="checkbox"/> All Fees <input type="checkbox"/> 1.16 Fees (Filing) <input type="checkbox"/> 1.17 Fees (Processing Ext. of time)
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FILE 'HCAPLUS' ENTERED AT 12:19:16 ON 17 NOV 2005
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L2 113 SEA ABB=ON PLU=ON MITSUMOTO T?/AU
L3 1933 SEA ABB=ON PLU=ON NAKAMURA I?/AU
L4 2 SEA ABB=ON PLU=ON L2 AND L3
D SCAN

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124996-93-6/B1 OR 16545-54-3/B1 OR 27029-76-1/B1 OR
42232-29-1/B1 OR 449762-40-7/B1 OR 5303-25-3/B1 OR
56992-87-1/B1 OR 63-74-1/B1 OR 693-36-7/B1 OR 79-41-4/B
I)
D SCAN

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L6 STR

FILE 'REGISTRY' ENTERED AT 13:40:40 ON 17 NOV 2005
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L8 SCR 1607
L9 9 SEA SSS SAM L6 AND L8
L10 SCR 1841
L11 13 SEA SSS SAM L6 AND L8 AND L10
L12 SCR 1918
L13 13 SEA SSS SAM L6 AND L8 AND L10 NOT L12
L14 SCR 2043
L15 16 SEA SSS SAM L6 AND L8 AND L10 NOT (L12 OR L14)
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L16 SCR 1993
L17 14 SEA SSS SAM L6 AND L8 AND L10 AND L16 NOT (L12 OR L14)
DIS SIA L6
L18 STR L6
L19 13 SEA SSS SAM L18 AND L8 AND L10 AND L16 NOT (L12 OR
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SAV L25 LEE323/A

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GENERAT?) OR PHOTINITIAT?)

L29 105 SEA ABB=ON PLU=ON L28 AND COMPOSITION?
 L30 35 SEA ABB=ON PLU=ON L29 AND LITHOG?
 D HITSTR
 L31 56 SEA ABB=ON PLU=ON L27(L) (RADICAL(2A)GENERAT? OR
 PHOTOINITIAT? OR (HEAT OR THERM?) (2A) INITIAT?)
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 L33 8 SEA ABB=ON PLU=ON L32 AND LITHOG?
 L34 37 SEA ABB=ON PLU=ON L30 OR L33
 L35 33 SEA ABB=ON PLU=ON L32 AND PHOTOG?/SC, SX
 L36 62 SEA ABB=ON PLU=ON L34 OR L35

=> d que 136

L8 SCR 1607
 L10 SCR 1841
 L14 SCR 2043
 L16 SCR 1993
 L20 SCR 2040
 L22 STR

Hy~G1~G2~~~~G1~Hy Ak @9
 1 2 8 6 7

REP G1=(1-2) C

VAR G2=9/CB

NODE ATTRIBUTES:

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 GGCAT IS PCY UNS AT 7
 DEFAULT ECLEVEL IS LIMITED
 ECOUNT IS M1-X2 N M0-X1 O M0-X1 S M0-X1 Se AT 1
 ECOUNT IS M1-X2 N M0-X1 O M0-X1 S M0-X1 Se AT 7
 ECOUNT IS E3 C AT 9

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED
 NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE

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 AND L20 NOT L14
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 L30 35 SEA FILE=HCAPLUS ABB=ON PLU=ON L29 AND LITHOG?
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 L36 62 SEA FILE=HCAPLUS ABB=ON PLU=ON L34 OR L35

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L36 ANSWER 1 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:1074618 HCAPLUS
DOCUMENT NUMBER: 143:336299
TITLE: Negatively working polymerizable composition and image-recording material using it
INVENTOR(S): Taguchi, Takanori; Fujimaki, Kazuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 97 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005274626	A2	20051006	JP 2004-83696	2004 0322
PRIORITY APPLN. INFO.:			JP 2004-83696	2004 0322

AB The composition contains (A) ≥1 compound having ≥1 partial structure represented by (I) R₁R₂C:CR₃(COX-) and ≥1 partial structure represented by (II) R₄R₅C:CR₆(A-) [R₁-6 = 1-valent substitute composed of H and nonmetal atom; X = O, NR₇ (R₇ = 1-valent substitute composed of H and nonmetal atom); A = aromatic group, heterocyclic ring], (B) radical polymerization initiator, and (C) IR ray absorber. The claimed recording material has a recording layer containing the compn . The composition has high sensitivity and storage stability, and the recording material has high printability. The composition is especially useful for lithog. printing plates.

IT 110992-87-5 835902-38-0
(IR absorber; neg. working polymerizable composition with high sensitivity and storage stability for image-recording material with high printability)

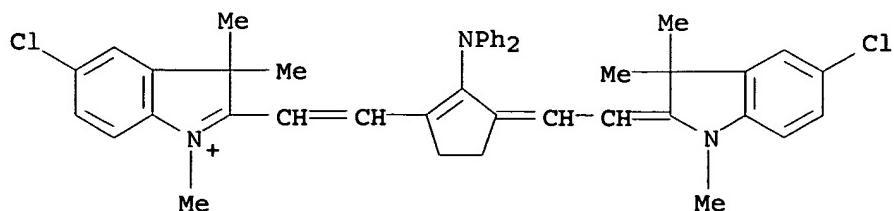
RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethyldene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

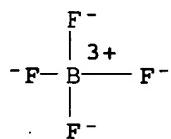
CRN 110992-86-4

CMF C43 H42 Cl2 N3



CM 2

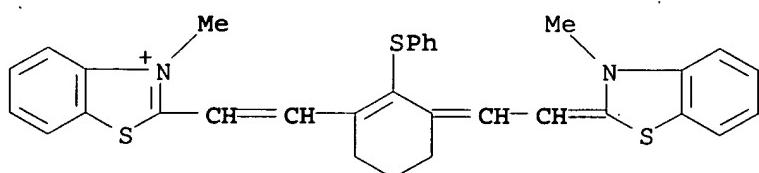
CRN 14874-70-5
 CMF B F4
 CCI CCS



RN 835902-38-0 HCAPLUS
 CN Benzothiazolium, 3-methyl-2-[2-[3-[(3-methyl-2(3H)-benzothiazolylidene)ethyldene]-2-(phenylthio)-1-cyclohexen-1-yl]ethenyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

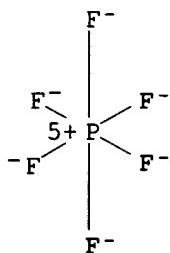
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CRN 835902-37-9
 CMF C32 H29 N2 S3



CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS



IC ICM G03F007-027
 ICS C08F220-10; G02B005-20; G03F007-004; G03H001-02
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST neg polymerizable compn image recording material;
 lithog printing plate neg polymerizable compn
 IT Lithographic plates
 Photoimaging materials
 Recording materials
 (neg. working polymerizable composition with high sensitivity and storage stability for image-recording material with high printability)
 IT 110992-87-5 303988-48-9 835902-38-0
 (IR absorber; neg. working polymerizable composition with high sensitivity and storage stability for image-recording material with high printability)
 IT 120307-06-4 253585-83-0 676349-80-7 745817-76-9
 847565-03-1
 (neg. working polymerizable composition with high sensitivity and storage stability for image-recording material with high printability)
 IT 1985-51-9 13048-33-4 40220-08-4 55008-64-5 55008-80-5
 64401-02-1 151745-21-0
 (neg. working polymerizable composition with high sensitivity and storage stability for image-recording material with high printability)

L36 ANSWER 2 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1023825 HCAPLUS
 DOCUMENT NUMBER: 143:315482
 TITLE: Negantive-working photosensitive compositions for manufacturing presensitized lithographic printing plates
 INVENTOR(S): Hiramoto, Ryuichi; Ozaki, Atsushi
 PATENT ASSIGNEE(S): Okamoto Chemical Industry Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005257828

A2

20050922

JP 2004-66596

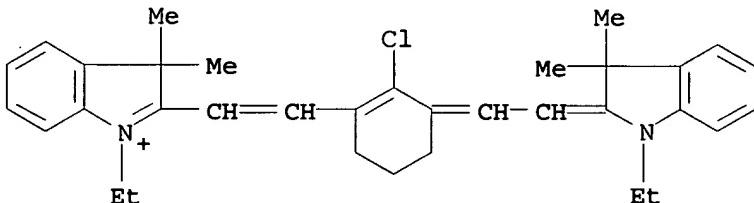
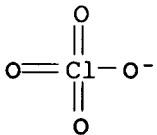
2004
0310

PRIORITY APPLN. INFO.:

JP 2004-66596

2004
03102004
0310

AB The compns. contain alkali-soluble polymers, diazonium resins, ethylenic monomers, IR absorbents, organic borate salts, and optionally imidazole compds. Also claimed are presensitized lithog. printing plates comprising photoimaging layers made from the compns. The photoimaging layers, for IR laser platemaking, show high photosensitivity, high adhesion with supports, high scratching resistance, and provide high printing wear.

IT 110992-66-0(IR absorbents; in neg.-working photosensitive compns
for manufacturing presensitized lithog. printing plates)**RN** 110992-66-0 HCPLUS**CN** 3H-Indolium, 2-[2-[2-chloro-3-[(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)**CM** 1**CRN** 110992-65-9**CMF** C34 H40 Cl N2**CM** 2**CRN** 14797-73-0**CMF** Cl O4**IC** ICM G03F007-00

ICS C08F002-50; G03F007-004; G03F007-029

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

ST lithog printing plate neg photosensitive polymer
compn; IR laser platemaking lithog plate neg

- IT photosensitive polymer
 Polyurethanes, preparation
 (acrylic-polyester-polyoxyalkylene-, in photoimaged layer;
 neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT Polyoxyalkylenes, preparation
 (acrylic-polyester-polyurethane-, in photoimaged layer;
 neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT Polyesters, preparation
 (acrylic-polyoxyalkylene-polyurethane-, in photoimaged layer;
 neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT Photoimaging materials
 (photopolymerizable, neg.-working; neg.-working photosensitive
 compns. for manufacturing presensitized lithog.
 printing plates)
- IT Polyurethanes, preparation
 (polyester-polyoxyalkylene-, block, methacrylate-containing; in
 neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT Lithographic plates
 (presensitized; neg.-working photosensitive compns.
 for manufacturing presensitized lithog. printing plates)
- IT 110992-66-0
 (IR absorbents; in neg.-working photosensitive compns
 . for manufacturing presensitized lithog. printing plates)
- IT 864498-56-6P
 (alkali-soluble; in neg.-working photosensitive compns.
 for manufacturing presensitized lithog. printing plates)
- IT 252255-01-9P
 (in neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT 4065-45-6D, 2-Methoxy-4-hydroxy-5-benzoylbenzenesulfonic acid,
 reaction products with 4-diazodiphenylamine-formaldehyde copolymer
 4986-89-4, Pentaerythritol tetraacrylate 27176-87-0D,
 Dodecylbenzenesulfonic acid, reaction products with
 4-diazodiphenylamine-formaldehyde copolymer 29570-58-9,
 Dipentaerythritol hexaacrylate 30939-08-3D, reaction products
 with benzenesulfonic acid derivs.
 (in neg.-working photosensitive compns. for manufacturing
 presensitized lithog. printing plates)
- IT 57592-66-2P, Pentaerythritol tetraacrylate homopolymer
 67653-78-5P, Dipentaerythritol hexaacrylate homopolymer
 (in photoimaged layer; neg.-working photosensitive
 compns. for manufacturing presensitized lithog.
 printing plates)
- IT 1707-68-2 120307-06-4, Tetrabutylammonium n-butyltriphenylborate
 864764-76-1
 (radical generators; in neg.-working
 photosensitive compns. for manufacturing presensitized
 lithog. printing plates)

L36 ANSWER 3 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:1004242 HCAPLUS
 DOCUMENT NUMBER: 143:315470
 TITLE: Curable composition and image
 forming material containing the same
 INVENTOR(S): Fujimaki, Kazuhiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 54 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005202343	A1	20050915	US 2005-75768	2005 0310
JP 2005258319	A2	20050922	JP 2004-73071	2004. 0315
EP 1577113	A2	20050921	EP 2005-5365	2005 0311

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
 EE, HU, PL, SK, BA, HR, IS, YU

PRIORITY APPLN. INFO.: JP 2004-73071 A
 2004
 0315

AB A curable composition for lithog. printing plate comprising: (A) an IR absorber which is a cyanine dye having a structure in which hetero rings are bonded to each other via a methine chain and which has at least one substituent having a structure selected from the group consisting of an amide bond, a urethane bond, a urea bond and a sulfonamide bond on at least one of aromatic rings at both ends, nitrogen atoms present on the hetero rings at both ends and the methine chain; (B) at least one of a radical generator and an acid generator; and (C) at least one of a radical polymerizable compound and an acid crosslinking agent.

IT 864660-52-6 864660-54-8 864660-56-0
 864660-58-2 864660-60-6 864660-62-8
 864660-63-9 864660-64-0 864660-66-2
 864660-68-4 864660-70-8 864660-72-0
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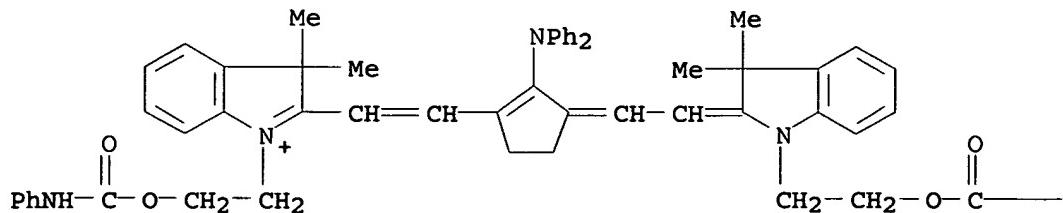
(cyanine dye; lithog. printing plate curable composition and image forming material containing)

RN 864660-52-6 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-51-5
 CMF C59 H58 N5 O4

PAGE 1-A



PAGE 1-B

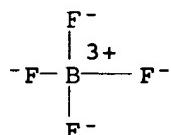
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CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



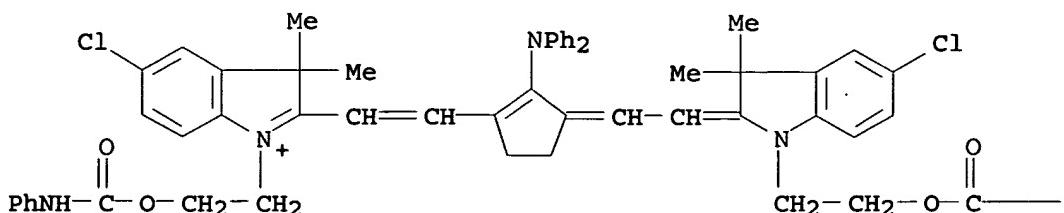
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CMF C59 H56 Cl2 N5 O4

PAGE 1-A

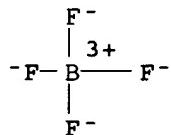


PAGE 1-B

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CM 2

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 CMF B F4
 CCI CCS

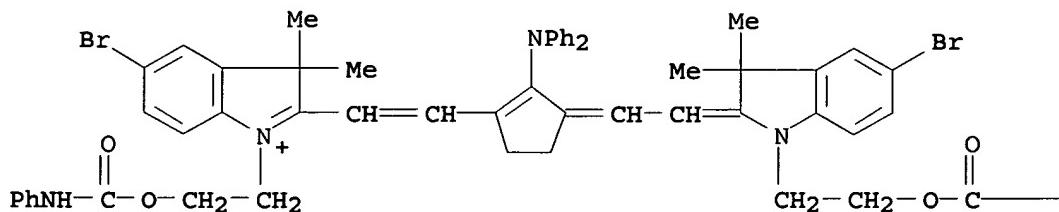


RN 864660-56-0 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-55-9
 CMF C59 H56 Br2 N5 O4

PAGE 1-A

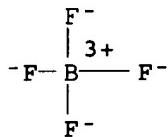


PAGE 1-B

— NPh

CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

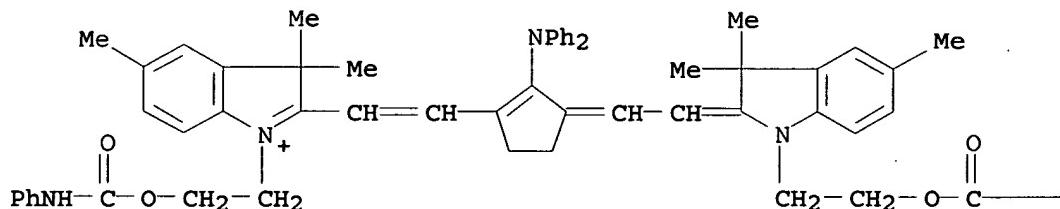


RN 864660-58-2 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-57-1
 CMF C61 H62 N5 O4

PAGE 1-A

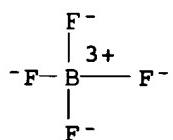


PAGE 1-B

— NHPh

CM 2

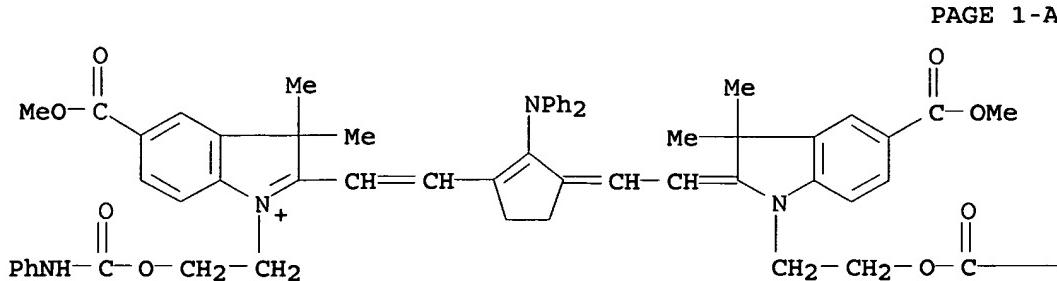
CRN 14874-70-5
 CMF B F4
 CCI CCS



RN 864660-60-6 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-59-3
 CMF C63 H62 N5 O8

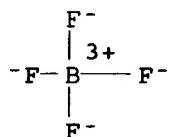


PAGE 1-B

— NHPh

CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

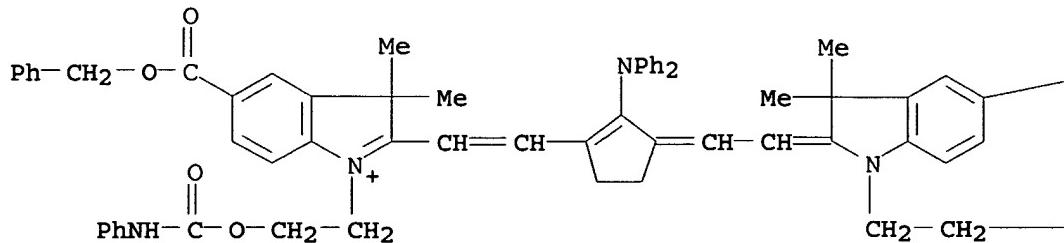


RN 864660-62-8 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

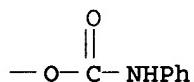
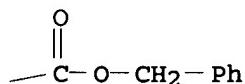
CM 1

CRN 864660-61-7
 CMF C75 H70 N5 O8

PAGE 1-A

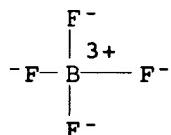


PAGE 1-B



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

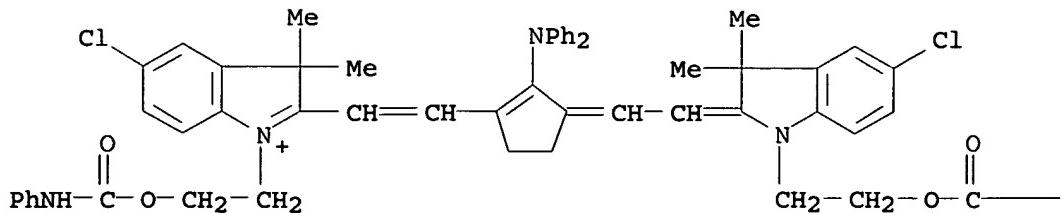


RN 864660-63-9 HCPLUS
 CN 3H-Indolium, 5-chloro-2-[2-[3-[[5-chloro-1,3-dihydro-3,3-dimethyl-1-[2-[(phenylamino)carbonyloxy]ethyl]-2H-indol-2-ylidene]ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(phenylamino)carbonyloxy]ethyl]-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 864660-53-7
 CMF C59 H56 Cl2 N5 O4

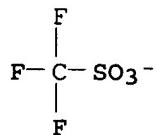
PAGE 1-A



PAGE 1-B

— NHPh

CM 2

CRN 37181-39-8
CMF C F3 O3 S

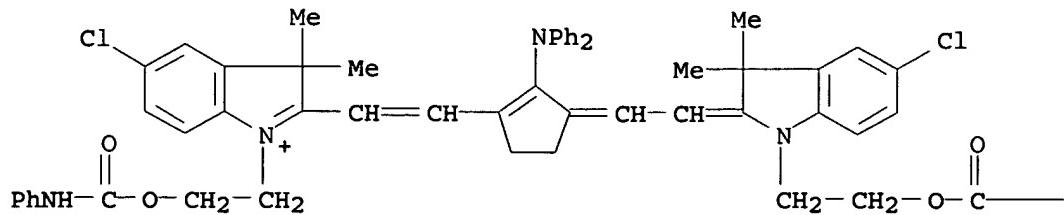
RN 864660-64-0 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[[5-chloro-1,3-dihydro-3,3-dimethyl-1-[2-[(phenylamino)carbonyloxy]ethyl]-2H-indol-2-ylidene]ethyliidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-1-[2-[(phenylamino)carbonyloxy]ethyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 864660-53-7
CMF C59 H56 Cl2 N5 O4

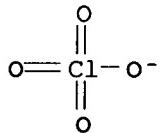
PAGE 1-A



PAGE 1-B

— NHPh

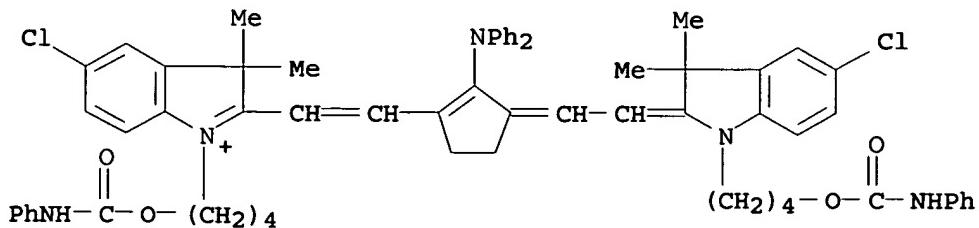
CM 2

CRN 14797-73-0
CMF Cl O4

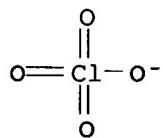
RN 864660-66-2 HCPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[[5-chloro-1,3-dihydro-3,3-dimethyl-1-[4-[[phenylamino]carbonyl]oxy]butyl]-2H-indol-2-ylidene]ethyliidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-1-[4-[[phenylamino]carbonyl]oxy]butyl], perchlorate (9CI) (CA INDEX NAME)

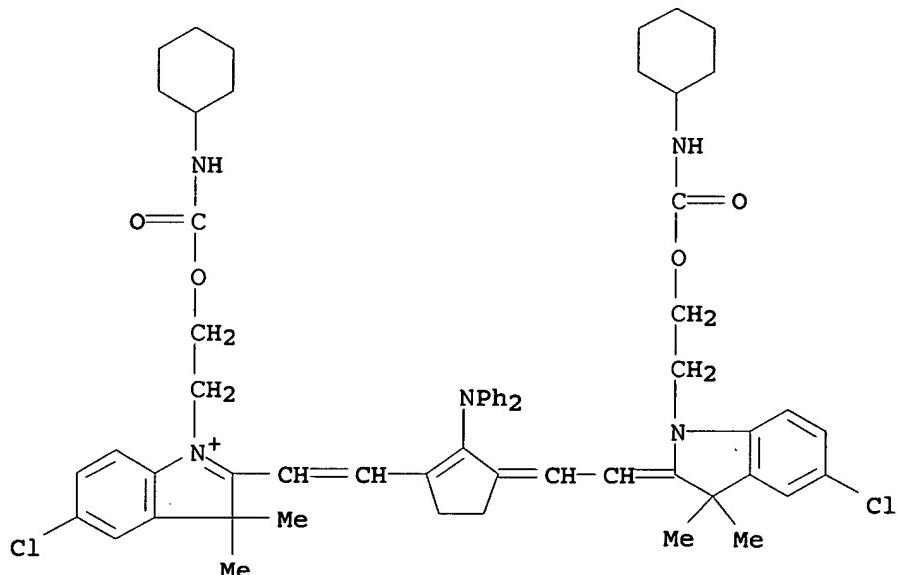
CM 1

CRN 864660-65-1
CMF C63 H64 Cl2 N5 O4

CM 2

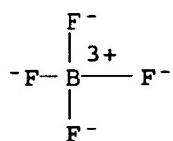
CRN 14797-73-0
CMF Cl O4RN 864660-68-4 HCPLUS
CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-67-3
CMF C59 H68 Cl2 N5 O4

CM 2

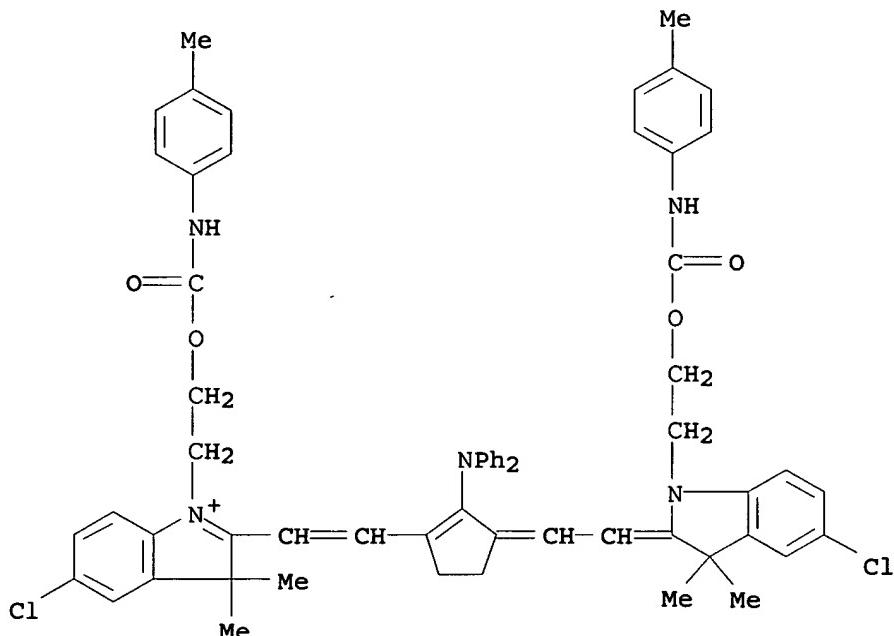
CRN 14874-70-5
CMF B F4
CCI CCS



RN 864660-70-8 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

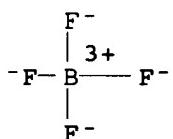
CM 1

CRN 864660-69-5
 CMF C61 H60 Cl2 N5 O4



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

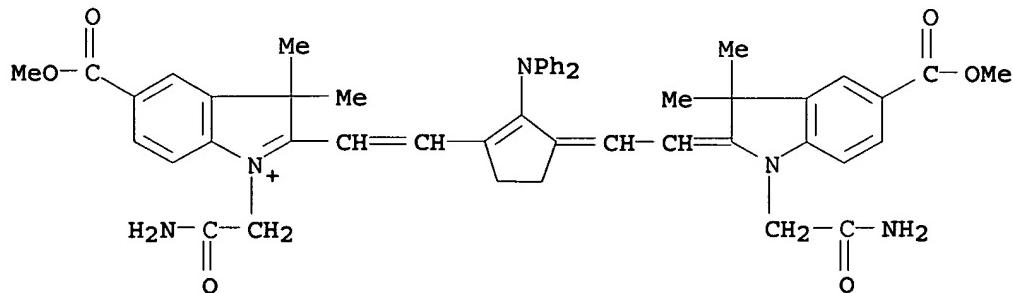


RN 864660-72-0 HCPLUS
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ylidene]ethyldene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-5-(methoxycarbonyl)-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

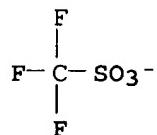
CM 1

CRN 864660-71-9
CMF C49 H50 N5 O6



CM 2

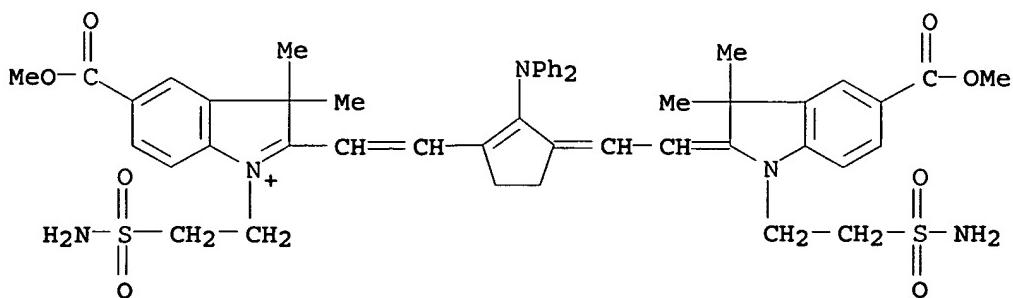
CRN 37181-39-8
CMF C F3 O3 S



RN 864660-74-2 HCPLUS
CN 3H-Indolium, 1-[2-(aminosulfonyl)ethyl]-2-[2-[3-[[1-[2-(aminosulfonyl)ethyl]-1,3-dihydro-5-(methoxycarbonyl)-3,3-dimethyl-2H-indol-2-ylidene]ethyldene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-5-(methoxycarbonyl)-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

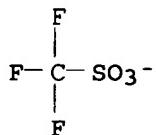
CM 1

CRN 864660-73-1
CMF C49 H54 N5 O8 S2



CM 2

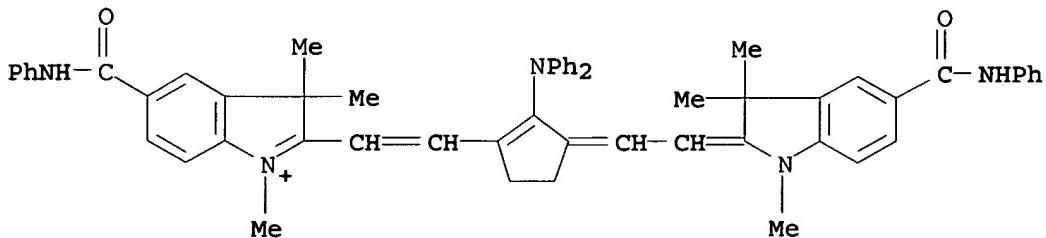
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CMF C F3 Q3 S



RN 864660-76-4 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

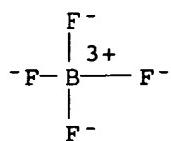
CM 1

CRN 864660-75-3
CMF C57 H54 N5 O2



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

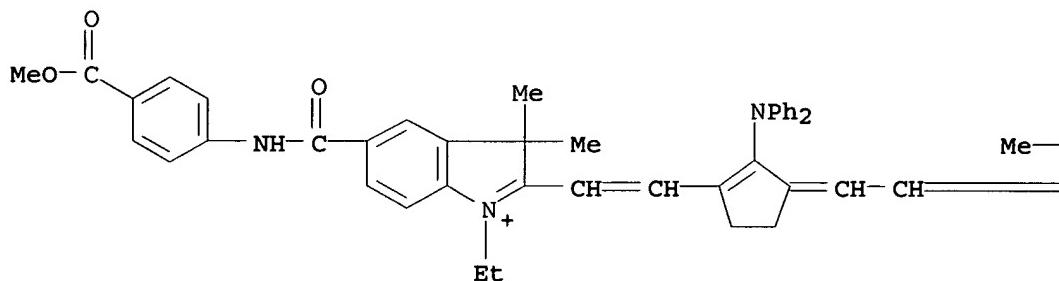


RN 864660-78-6 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

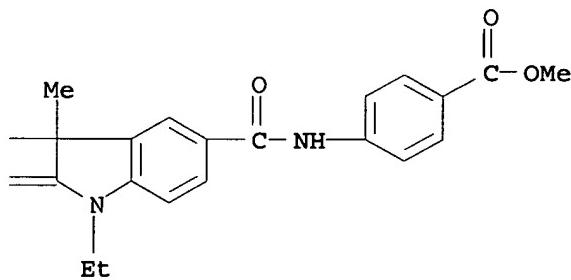
CM 1

CRN 864660-77-5
 CMF C63 H62 N5 O6

PAGE 1-A

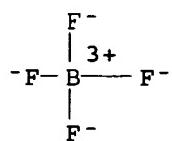


PAGE 1-B



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



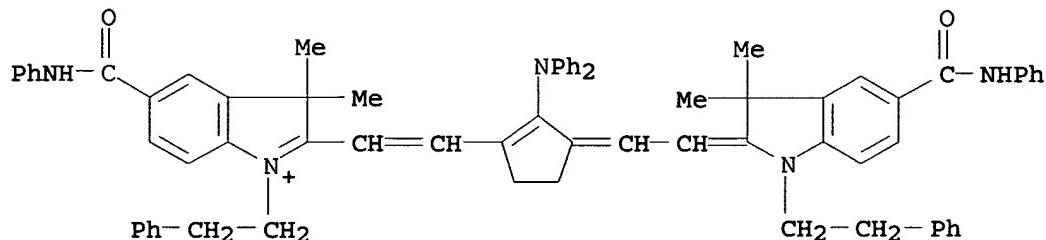
RN 864660-80-0 HCPLUS

CN 3H-Indolium, 2-[2-[3-[[1,3-dihydro-3,3-dimethyl-5-[(phenylamino)carbonyl]-1-(2-phenylethyl)-2H-indol-2-ylidene]ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3,3-dimethyl-5-[(phenylamino)carbonyl]-1-(2-phenylethyl)-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 864660-79-7

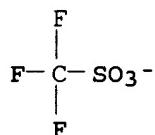
CMF C71 H66 N5 O2



CM 2

CRN 37181-39-8

CMF C F3 O3 S



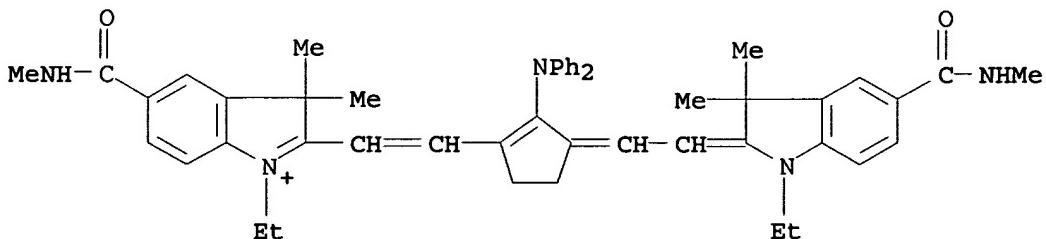
RN 864660-82-2 HCPLUS

CN INDEX NAME NOT YET ASSIGNED

CM 1

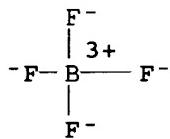
CRN 864660-81-1

CMF C49 H54 N5 O2



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

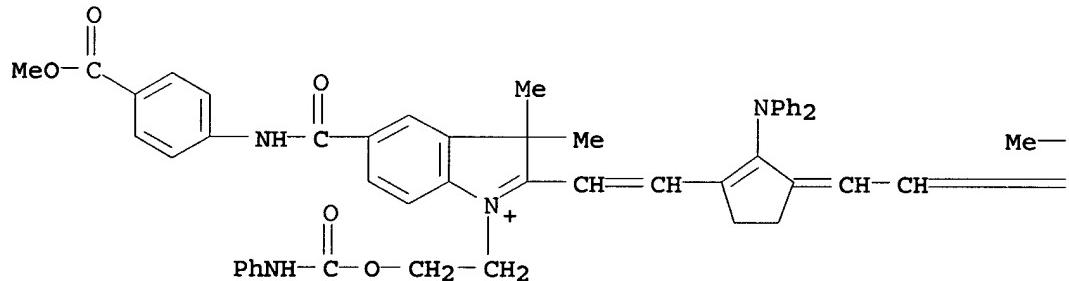


RN 864660-84-4 HCAPLUS
 CN INDEX NAME NOT YET ASSIGNED

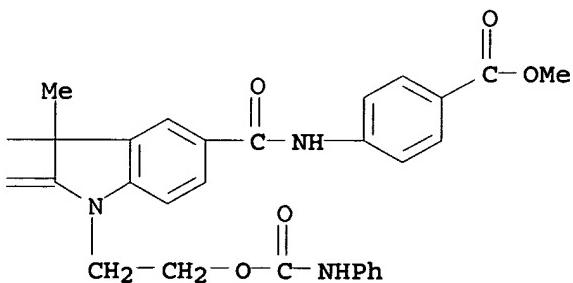
CM 1

CRN 864660-83-3
 CMF C77 H72 N7 O10

PAGE 1-A

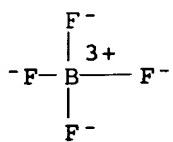


PAGE 1-B



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

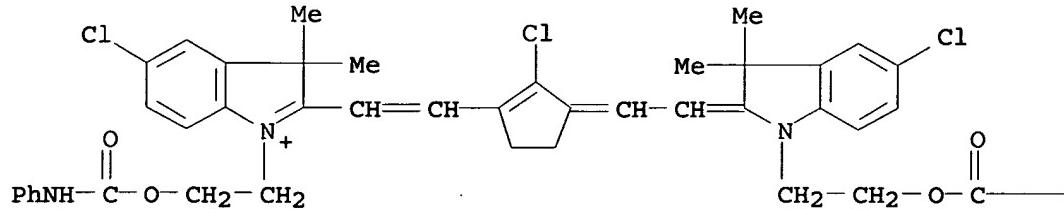


RN 864660-86-6 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-85-5
 CMF C47 H46 Cl3 N4 O4

PAGE 1-A

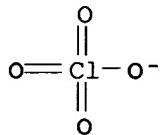


PAGE 1-B

— NHPh

CM 2

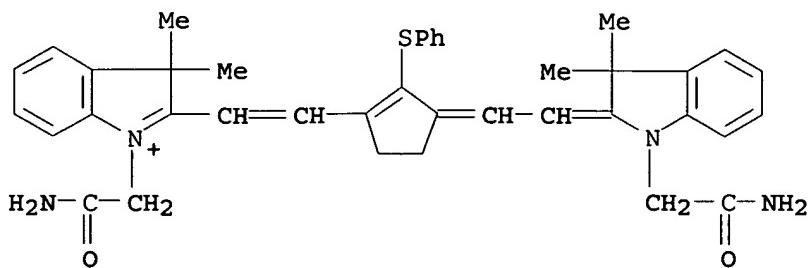
CRN 14797-73-0
 CMF Cl O4



RN 864660-88-8 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

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CRN 864660-87-7
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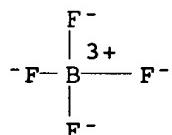


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



RN 864660-90-2 HCPLUS

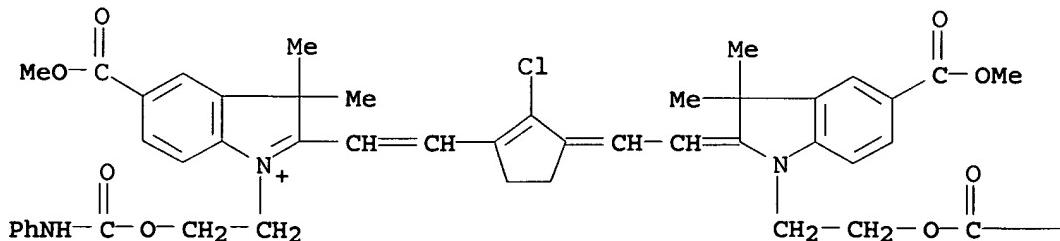
CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-5-(methoxycarbonyl)-3,3-dimethyl-1-[2-[(phenylamino)carbonyl]oxy]ethyl]-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl ethenyl]-5-(methoxycarbonyl)-3,3-dimethyl-1-[2-[(phenylamino)carbonyl]oxy]ethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 864660-89-9

CMF C51 H52 Cl N4 O8

PAGE 1-A

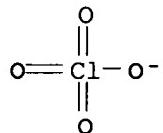


PAGE 1-B

— NHPH

CM 2

CRN 14797-73-0
CMF Cl O4

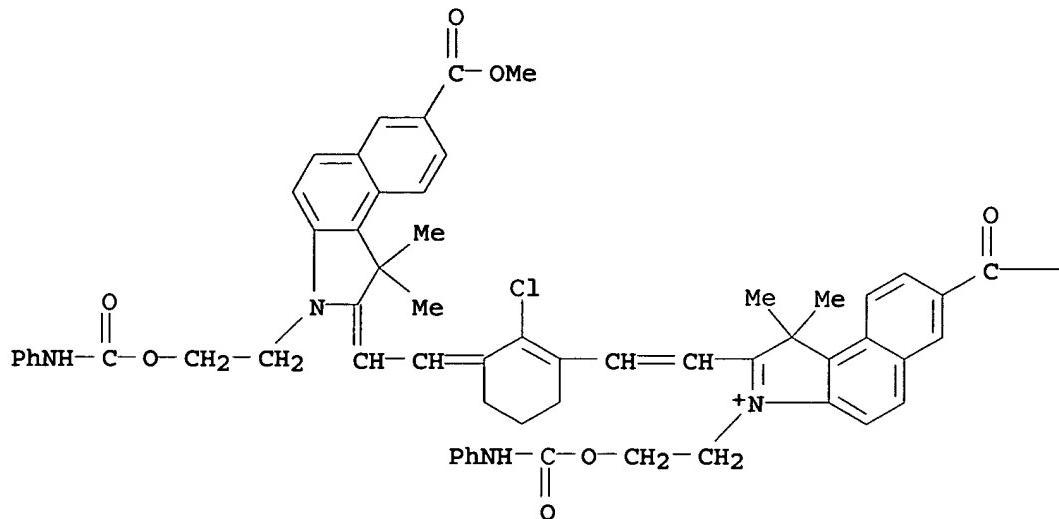


RN 864660-92-4 HCPLUS
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-7-(methoxycarbonyl)-1,1-dimethyl-3-[2-[(phenylamino)carbonyl]oxy]ethyl]-2H-benz[e]indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-7-(methoxycarbonyl)-1,1-dimethyl-3-[[[(phenylamino)carbonyl]oxy]ethyl]-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 864660-91-3
CMF C60 H58 Cl N4 O8

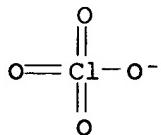
PAGE 1-A



PAGE 1-B

— OMe

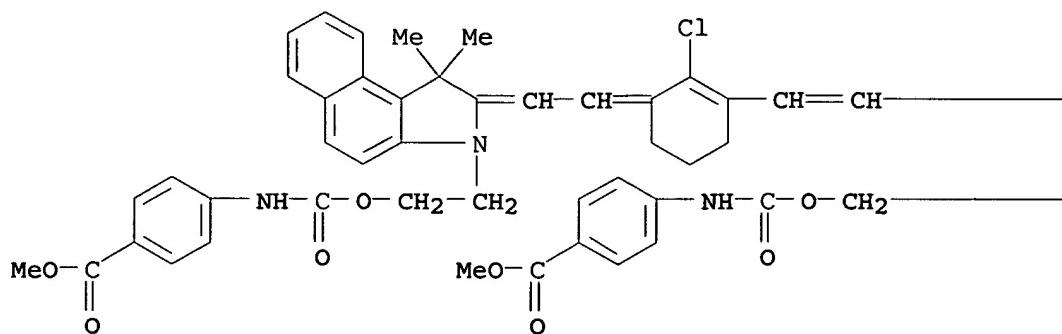
CM 2

CRN 14797-73-0
CMF Cl O4RN 864660-94-6 HCAPLUS
CN INDEX NAME NOT YET ASSIGNED

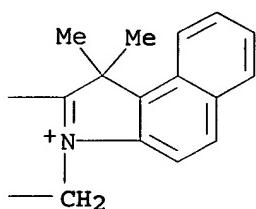
CM 1

CRN 864660-93-5
CMF C60 H58 Cl N4 O8

PAGE 1-A

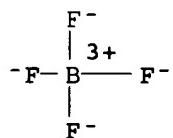


PAGE 1-B



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS

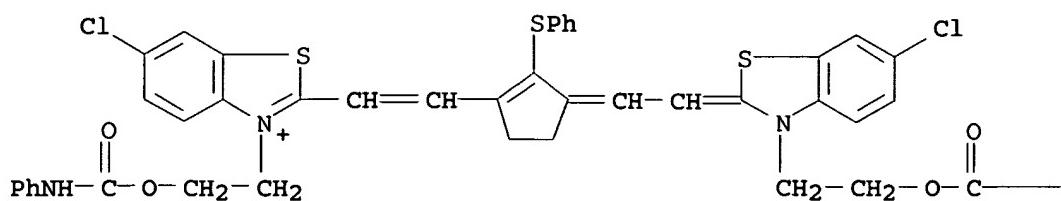


RN 864660-96-8 HCAPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

CRN 864660-95-7
 CMF C47 H39 Cl2 N4 O4 S3

PAGE 1-A



PAGE 1-B

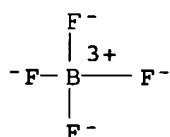
— NHPh

CM 2

CRN 14874-70-5

CMF B F4

CCI CCS

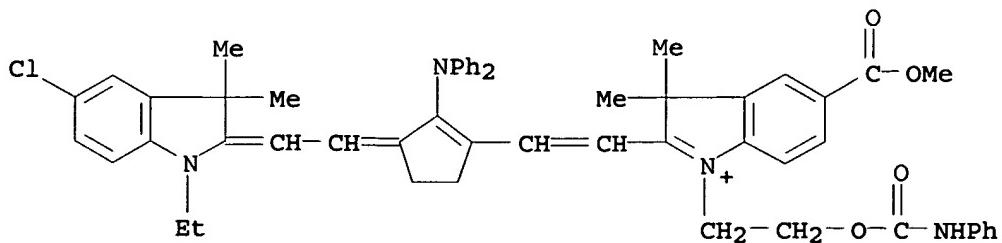


RN 864660-98-0 HCPLUS
 CN INDEX NAME NOT YET ASSIGNED

CM 1

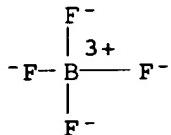
CRN 864660-97-9

CMF C54 H54 Cl N4 O4



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



IC ICM G03C001-492
 INCL 430270100
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST lithog printing plate curable compn image material
 IT Optical materials
 (IR absorbers; lithog. printing plate curable composition and image forming material containing)
 IT IR materials
 (absorbers; lithog. printing plate curable composition and image forming material containing)
 IT Cyanine dyes
 Lithographic plates
 (lithog. printing plate curable composition and image forming material containing)
 IT 864660-52-6 864660-54-8 864660-56-0
 864660-58-2 864660-60-6 864660-62-8
 864660-63-9 864660-64-0 864660-66-2
 864660-68-4 864660-70-8 864660-72-0
 864660-74-2 864660-76-4 864660-78-6
 864660-80-0 864660-82-2 864660-84-4
 864660-86-6 864660-88-8 864660-90-2
 864660-92-4 864660-94-6 864660-96-8
 864660-98-0
 (cyanine dye; lithog. printing plate curable composition and image forming material containing)

L36 ANSWER 4 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:732002 HCAPLUS
 DOCUMENT NUMBER: 143:202967
 TITLE: IR-sensitive negative-working polymerizable compositions suitable for presensitized lithographic printing plates
 INVENTOR(S): Taninaka, Hiromitsu; Goto, Takahiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 55 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005215147	A2	20050811	JP 2004-19746	

2004
0128

PRIORITY APPLN. INFO.:

JP 2004-19746

2004
0128

AB The polymerizable compns. contain (a) oxime radical polymerization initiators YXON:C(Q)Z [X = carbonyl, sulfonyl, sulfoxide; Y = alkyl, alkenyl, alkynyl, aryl, etc.; Q, Z = monovalent nonmetallic substituent group (having substituents selected from H, O, halo, N, and S)], (b) ethylenic monomers, (c) IR-absorbing agents, and optionally (d) binder polymers bearing ethylenic double bonds. The compns. show high sensitivity to light and/or heat and high storage stability, and are suitable for the lithog. plates for IR laser direct CTP platemaking.

IT 183745-11-1

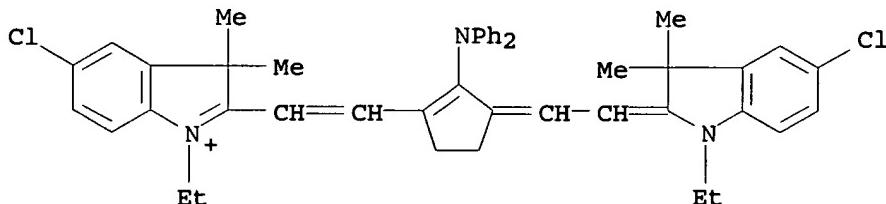
(IR absorber; photopolymerizable composition containing oxime polymerization initiator suitable for lithog. printing plate)

RN 183745-11-1 HCAPLUS**CN** 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 162717-38-6

CMF C45 H46 Cl2 N3

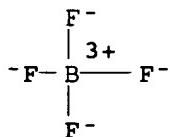


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS

**IC** ICM G03F007-028

ICS C08F002-50; C08F004-00; G03F007-00; G03F007-004; G03F007-038

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and

Other Reprographic Processes)
 Section cross-reference(s): 35, 37, 38
 ST neg working IR photopolymerizable compn polymn initiator
 oxime; lithog printing plate polymerizable compn
 polymn initiator oxime
 IT Polyoxalkylenes, preparation
 (acrylic, photopolymd. layer of lithog. plate;
 photopolymerizable composition containing oxime polymerization
 initiator suitable for lithog. printing plate)
 IT Photoimaging materials
 (photopolymerizable, neg.-working; photopolymerizable
 composition containing oxime polymerization initiator suitable for
 lithog. printing plate)
 IT Polymerization catalysts
 (photopolymn.; photopolymerizable composition containing oxime
 polymerization initiator suitable for lithog. printing
 plate)
 IT Lithographic plates
 (presensitized; photopolymerizable composition containing
 oxime polymerization initiator suitable for lithog. printing
 plate)
 IT 183745-11-1
 (IR absorber; photopolymerizable composition containing oxime
 polymerization initiator suitable for lithog. printing
 plate)
 IT 709037-26-3
 (binder; photopolymerizable composition containing oxime
 polymerization initiator suitable for lithog. printing
 plate)
 IT 64401-02-1
 (monomer; photopolymerizable composition containing oxime
 polymerization initiator suitable for lithog. printing
 plate)
 IT 861717-57-9P
 (photopolymd. layer of lithog. plate;
 photopolymerizable composition containing oxime polymerization
 initiator suitable for lithog. printing plate)
 IT 253585-83-0 861717-53-5 861717-54-6 861717-55-7
 861717-56-8
 (photopolymn. initiator; photopolymerizable composition
 containing oxime polymerization initiator suitable for lithog.
 printing plate)

L36 ANSWER 5 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:695804 HCAPLUS

DOCUMENT NUMBER: 143:163136

TITLE: Presensitized lithographic printing
 plates showing high sensitivity and
 high-temperature storage stability

INVENTOR(S): Shibuya, Akinori

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 83 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005208133

A2 20050804

JP 2004-11913

2004
0120

PRIORITY APPLN. INFO.:

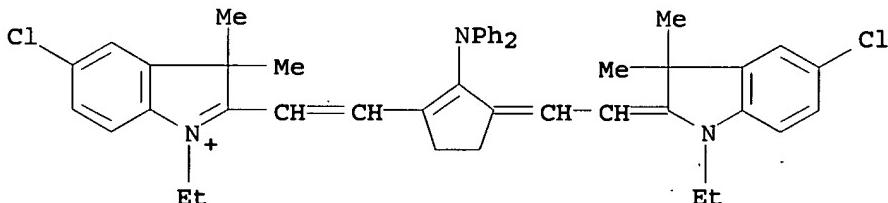
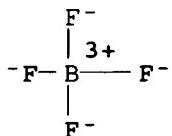
JP 2004-11913

2004
0120

AB The lithog. plates comprises, on supports, photopolymerizable layers containing sensitizing dyes, radical - or acid-generating agents upon interaction with the excited sensitizing dyes, ethylenic monomers, and plasticizers. Preferably, the plasticizers bear ≥ 4 ester groups. Also claimed are the lithog. plates showing small drop in dot area upon storage at 60° for 10 days (definition of the test and its allowable results given). The plasticizers remarkably improve storage stability of the plates.

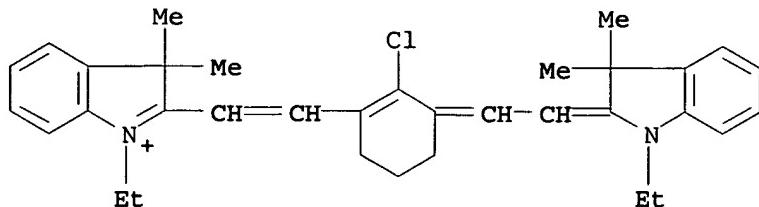
IT 183745-11-1 860028-06-4

(sensitizing dye, in presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage stabilizer)

RN 183745-11-1 HCPLUS**CN** 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)**CM** 1**CRN** 162717-38-6**CMF** C45 H46 Cl2 N3**CM** 2**CRN** 14874-70-5**CMF** B F4**CCI** CCS**RN** 860028-06-4 HCPLUS**CN** INDEX NAME NOT YET ASSIGNED

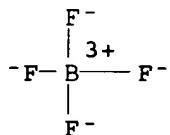
CM 1

CRN 110992-65-9
 CMF C34 H40 Cl N2



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



- IC ICM G03F007-00
 ICS G03F007-004; G03F007-26
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
 ST presensitized lithog printing plate photopolymerizable compn; plasticizer additive photopolymerizable compn lithog plate
 IT Polyethers, preparation
 Polyurethanes, preparation
 (acrylic, photopolymd. layer; presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage stabilizer)
 IT Photoimaging materials
 (photopolymerizable; presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage stabilizer)
 IT Lithographic plates
 (presensitized; presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage stabilizer)
 IT 4986-89-4 67653-78-5 80937-22-0, UA 101H
 (monomer; in presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage stabilizer)
 IT 29570-58-9P 57592-66-2P 113506-31-3P
 (photopolymd. layer; presensitized lithog. plate having photopolymerizable layer containing plasticizer as storage

stabilizer)
IT 1787-50-4 125051-32-3 125407-19-4 191726-69-9 745817-76-9
(photopolymn. catalyst; in presensitized lithog.
plate having photopolymerizable layer containing plasticizer as
storage stabilizer)
IT 117-84-0 994-73-0 1330-78-5 22733-95-5 26719-50-6
75975-63-2 122931-53-7 860028-07-5 860028-08-6 860028-09-7
(plasticizer and storage stabilizer; in presensitized
lithog. plate having photopolymerizable layer containing
plasticizer as storage stabilizer)
IT 1628-58-6 118234-40-5 183745-11-1 293329-40-5
506426-96-6 860028-04-2 860028-05-3 860028-06-4
(sensitizing dye; in presensitized lithog. plate
having photopolymerizable layer containing plasticizer as storage
stabilizer)

L36 ANSWER 6 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:408526 HCAPLUS

DOCUMENT NUMBER: 142:438732

TITLE: **Lithographic plates showing high sensitivity for direct IR-laser platemaking and good printability and yellow light-resistant photopolymerizable compositions therefor**

INVENTOR(S): Kakino, Ryuki; Kunita, Kazuto; Fujimaki, Kazuhiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 86 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
JP 2005122038	A2	20050512	JP 2003-359350	2003 1020

PRIORITY APPLN. INFO.: JP 2003-359350

2003
1020

OTHER SOURCE(S): MARPAT 142:438732

AB The compns. contain (A) ZYXCR1R2CO2H (R1, R2 = H, monovalent substituent; X = O, S, SO₂, NR₃; R3 = H, monovalent substituent other than aromatic; Y = divalent linking group containing no aromatic ring in main chain; Z = aromatic) or WXCR1R2CO2H (R1, R2, X = same as above; W = H, same as R3), (B) polymerizable compds., (C) radical initiators, and optionally (D) IR absorbers. Also claimed are lithog. plates having recording layers of the above compns. on supports.

IT 110992-66-0 110992-87-5
(IR absorbers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)

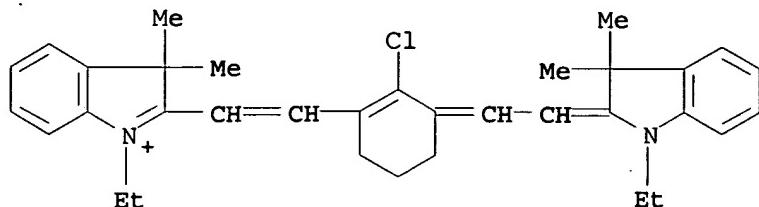
RN 110992-66-0 HCAPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1-ethyl-1,3-dihydro-3,3-dimethyl-

2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-ethyl-
3,3-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

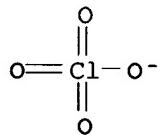
CM 1

CRN 110992-65-9
CMF C34 H40 Cl N2



CM 2

CRN 14797-73-0
CMF Cl O4

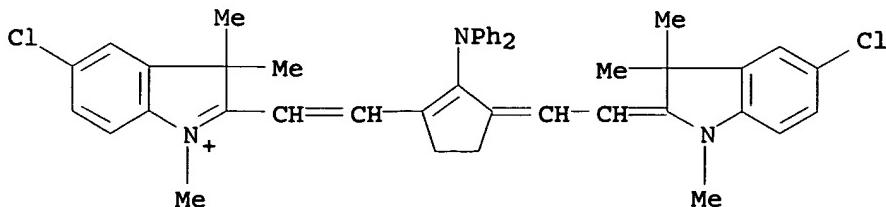


RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

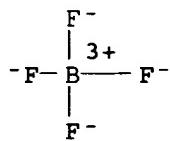
CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
CMF B F4

CCI CCS



- IC ICM G03F007-004
 ICS C08F002-44; G03F007-00
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
- ST lithog plate direct IR laser platemaking; carboxylic acid photoimaging yellow light resistance; acrylic photopolymer light resistance presensitized lithog plate
- IT Optical materials
 (IR absorbers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT IR materials
 (absorbers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT Lithographic plates
 (neg.-working presensitized; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT Photoimaging materials
 (photopolymerizable; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT 110992-66-0 110992-87-5
 (IR absorbers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT 98-88-4, Benzoyl chloride 142-73-4, Iminodiacetic acid 704-65-4, o-Acetoxybenzyl bromide
 (in preparation of carboxylic acid compds.; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT 29570-58-9
 (monomers; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT 676349-80-7 790225-29-5
 (radical polymerization initiators; yellow light-resistant photopolymerizable compns. for lithog. plates with high sensitivity for direct IR-laser platemaking and good printability)
- IT 7372-13-6P 20722-11-6P

(yellow light-resistant photopolymerizable compns.
for lithog. plates with high sensitivity for direct
IR-laser platemaking and good printability)

IT 850754-62-0P 850754-65-3P
(yellow light-resistant photopolymerizable compns.
for lithog. plates with high sensitivity for direct
IR-laser platemaking and good printability)

IT 54884-96-7 71995-54-5 147974-54-7 220335-84-2 850754-51-7
850754-52-8 850754-53-9 850754-54-0 850754-55-1
850754-56-2 850754-57-3 850754-58-4
(yellow light-resistant photopolymerizable compns.
for lithog. plates with high sensitivity for direct
IR-laser platemaking and good printability)

IT 50583-46-5 850754-60-8
(yellow light-resistant photopolymerizable compns.
for lithog. plates with high sensitivity for direct
IR-laser platemaking and good printability)

L36 ANSWER 7 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:212591 HCAPLUS
DOCUMENT NUMBER: 142:306466
TITLE: Photopolymerizable photoimaging
composition and negatively-working
directly-imaging lithographic
printing plate precursors therefrom
INVENTOR(S): Fujimaki, Kazuhiro
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005062482	A2	<u>20050310</u>	JP 2003-292530	2003 0812
PRIORITY APPLN. INFO.:			JP 2003-292530	2003 0812

AB The title composition contains a radical
polymerization initiator, a radical polymerization
co-initiator of ≤ 1.10 V oxidation potential, an IR-absorber,
and radically polymerizable compds. The composition shows
high sensitivity and good storageability and provides highly
durable layers.

IT 110992-87-5 835902-38-0

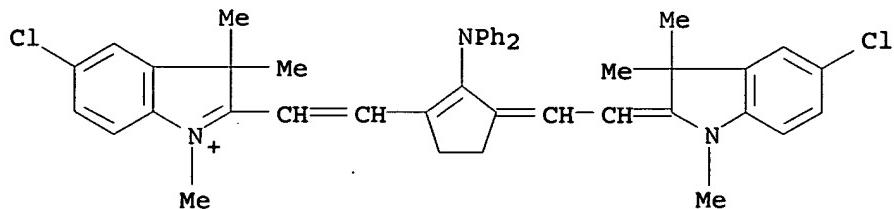
(IR-absorber in composition)

RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-)
(9CI) (CA INDEX NAME)

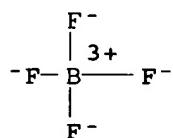
CM 1

CRN 110992-86-4
CMF C43 H42 Cl2 N3



CM 2

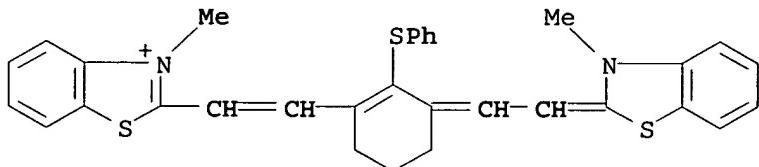
CRN 14874-70-5
CMF B F4
CCI CCS



RN 835902-38-0 HCPLUS
CN Benzothiazolium, 3-methyl-2-[2-[3-[(3-methyl-2(3H)-benzothiazolylidene)ethylidene]-2-(phenylthio)-1-cyclohexen-1-yl]ethenyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

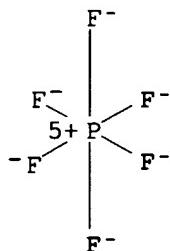
CM 1

CRN 835902-37-9
CMF C32 H29 N2 S3



CM 2

CRN 16919-18-9
CMF F6 P
CCI CCS



IC ICM G03F007-029
 ICS C08F002-44; C08F002-50; G03F007-004; G03F007-00
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST photopolymerizable photoimaging compn neg lithog printing plate precursor
 IT Lithographic plates
 (photopolymerizable photoimaging composition and neg.-working directly-imaging lithog. printing plate precursors therefrom)
 IT Photoimaging materials
 (photopolymerizable; photopolymerizable photoimaging composition and neg.-working directly-imaging lithog . printing plate precursors therefrom)
 IT 110992-87-5 603959-43-9 835902-38-0
 (IR-absorber in composition)
 IT 603-34-9D, radical polymerization co-initiator
 1628-58-6D, radical polymerization co-initiator
 19525-59-8D, radical polymerization co-initiator
 511304-75-9D, radical polymerization co-initiator
 847573-63-1D, radical polymerization co-initiator
 847573-64-2D, radical polymerization co-initiator
 847590-95-8D, radical polymerization co-initiator
 847590-96-9D, radical polymerization co-initiator
 847590-98-1D, radical polymerization co-initiator
 847590-99-2D, radical polymerization co-initiator
 847591-01-9D, radical polymerization co-initiator
 847591-02-0D, radical polymerization co-initiator
 (radical polymerization co-initiator in composition)
 IT 676349-78-3 761432-18-2 790225-29-5
 (radical polymerization initiator in compn .)
 IT 29570-58-9 80937-22-0 91105-84-9 761432-20-6 847565-07-5
 847573-65-3
 (radically polymerizable compds. in composition)

L36 ANSWER 8 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2005:209978 HCAPLUS
 DOCUMENT NUMBER: 142:306465
 TITLE: Photopolymerizable photoimaging composition and negatively-working directly-imaging lithographic printing plate precursors made thereof
 INVENTOR(S): Fujimaki, Kazuhiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 81 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005062478	A2	20050310	JP 2003-292453	2003 0812
			JP 2003-292453	2003 0812

PRIORITY APPLN. INFO.:

AB The title composition contains a compound with an amino groups and hydroxy groups, an IR-absorber, a radical polymerization initiator, and ethylenic unsatd. compds. The composition shows high sensitivity and good storageability and provides highly durable layers.

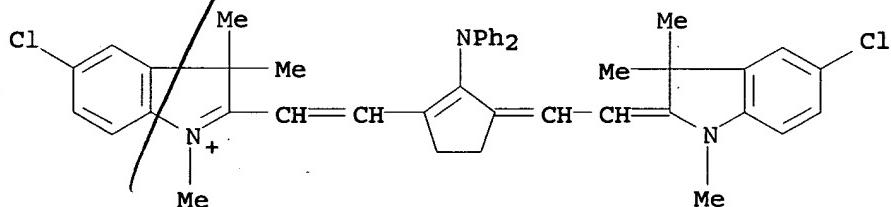
IT 110992-87-5 835902-38-0
 (IR-absorber in composition)

RN 110992-87-5 HCPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-)
 (9CI) (CA INDEX NAME)

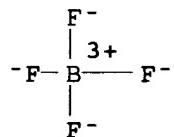
CM 1

CRN 110992-86-4
 CMF C43 H42 Cl2 N3



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



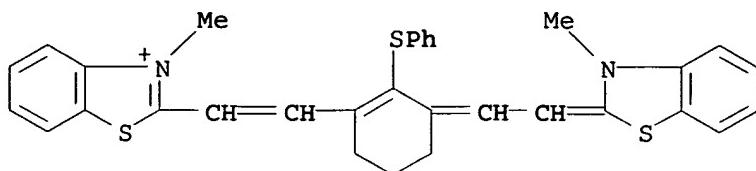
RN 835902-38-0 HCPLUS

CN Benzothiazolium, 3-methyl-2-[2-[3-[(3-methyl-2(3H)-benzothiazolylidene)ethylidene]-2-(phenylthio)-1-cyclohexen-1-yl]ethenyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 835902-37-9

CMF C32 H29 N2 S3

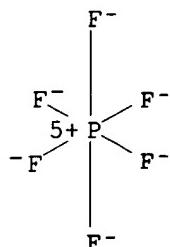


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



IC ICM G03F007-004

ICS C08F002-44; G03F007-00

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photopolymerizable photoimaging compn neg lithog printing plate precursor

IT Photolithography
(photopolymerizable photoimaging composition and neg.-working directly-imaging lithog. printing plate precursors therefrom)

IT Photoimaging materials
(photopolymerizable; photopolymerizable photoimaging composition and neg.-working directly-imaging lithog. printing plate precursors therefrom)

IT 110992-87-5 835902-38-0
(IR-absorber in composition)
IT 93-90-3 102-71-6, uses 111-42-2, uses 120-07-0 122-96-3,
1,4-Piperazinediethanol 140-07-8 732-51-4 3040-44-6,
1-Piperidineethanol 6303-96-4 6315-51-1 13127-77-0
19721-54-1 27076-96-6 71345-85-2 89943-04-4 91645-48-6
121459-15-2, 1H-Indole-1-ethanol 847564-87-8 847564-92-5
847564-93-6 847564-95-8

(compound with an amino groups and hydroxy groups in

composition)

IT 761432-20-6 847565-07-5
 (ethylenic unsatd. compds. in composition)

IT 120307-06-4 253585-83-0 603959-43-9 676349-78-3
 761432-18-2 790225-29-5 847565-03-1
 (radical polymerization initiator in compn
 .)

L36 ANSWER 9 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:904356 HCAPLUS
 DOCUMENT NUMBER: 141:386412
 TITLE: Polymerizable composition and
 lithographic original plate using it
 INVENTOR(S): Shimada, Kazuto
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 73 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004301915	A2	<u>20041028</u>	JP 2003-91916	2003 0328
PRIORITY APPLN. INFO.: JP 2003-91916				2003 0328

AB The composition contains (A) a compound with absorption max at 700-1200 nm, (B) a compound with absorption max at 700-1200 nm and having luminescence intensity at 750-1300 nm different from that of A, (C) a radical polymerization initiator, and (D) an ethylenic unsatd. compound. The lithog. original plate with the composition on a support is claimed. High quality image with fine dot is obtained using high intensity IR laser beam.

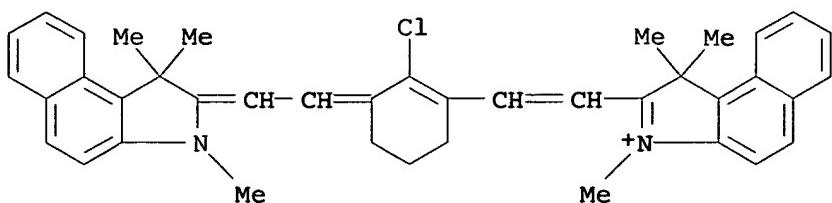
IT 134127-48-3 183745-11-1 669714-62-9
 669714-63-0 669714-65-2 669714-67-4
 669714-71-0 779332-17-1
 (IR laser-sensitive neg.-working lithog. plate using
 specific dyes)

RN 134127-48-3 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1)
 (9CI) (CA INDEX NAME)

CM 1

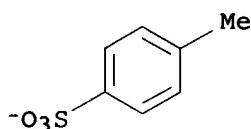
CRN 134127-47-2
 CMF C40 H40 Cl N2



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



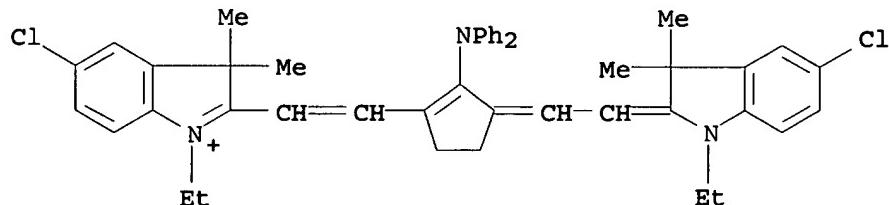
RN 183745-11-1 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 162717-38-6

CMF C45 H46 Cl2 N3

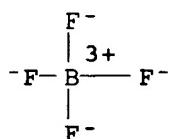


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



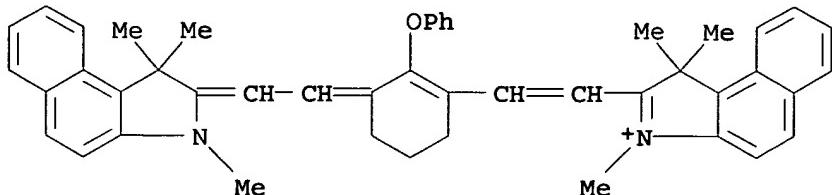
RN 669714-62-9 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-phenoxy-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 669714-61-8

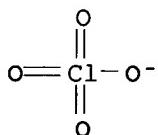
CMF C46 H45 N2 O



CM 2

CRN 14797-73-0

CMF Cl O4



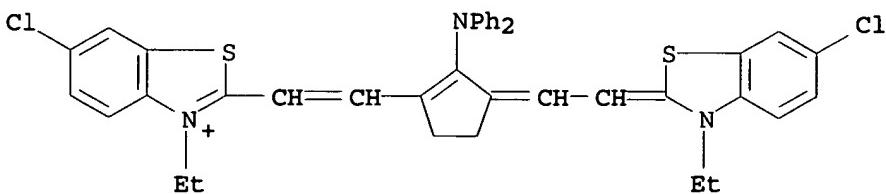
RN 669714-63-0 HCAPLUS

CN Benzothiazolium, 6-chloro-2-[2-[3-[(6-chloro-3-ethyl-2(3H)-benzothiazolylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-3-ethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 98970-05-9

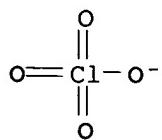
CMF C39 H34 Cl2 N3 S2



CM 2

CRN 14797-73-0

CMF Cl O4



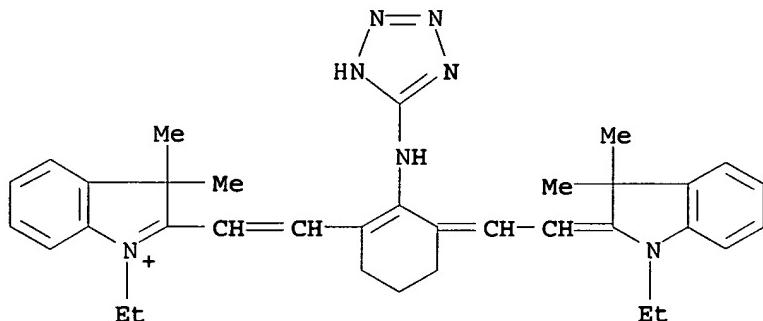
RN 669714-65-2 HCAPLUS

CN 3H-Indolium, 1-ethyl-2-[2-[3-[(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(1H-tetrazol-5-ylamino)-1-cyclohexen-1-yl]ethenyl]-3,3-dimethyl-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 669714-64-1

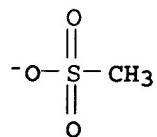
CMF C35 H42 N7



CM 2

CRN 16053-58-0

CMF C H3 O3 S



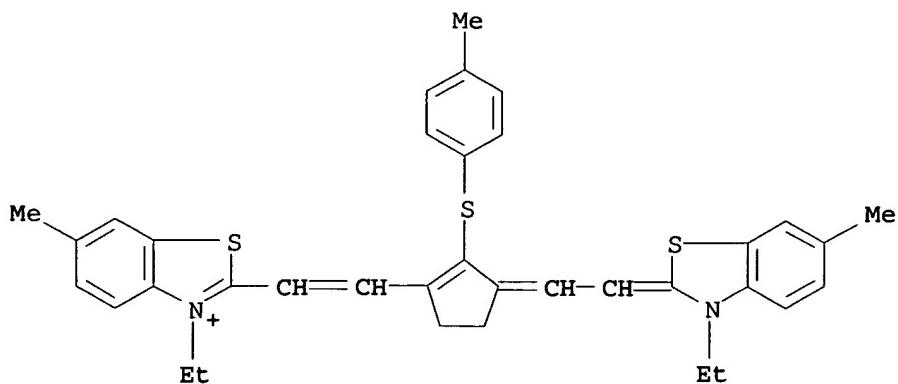
RN 669714-67-4 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[3-[(3-ethyl-6-methyl-2(3H)-benzothiazolylidene)ethylidene]-2-[(4-methylphenyl)thio]-1-cyclopenten-1-yl]ethenyl]-6-methyl-, perchlorate (9CI) (CA INDEX NAME)

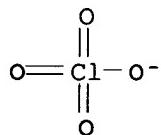
CM 1

CRN 669714-66-3

CMF C36 H37 N2 S3

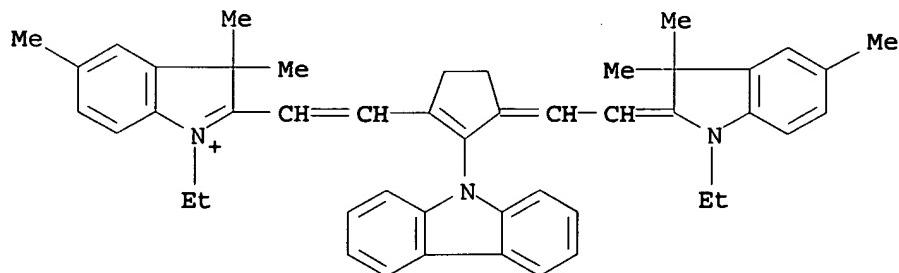


CM 2

CRN 14797-73-0
CMF Cl O4

RN 669714-71-0 HCAPLUS
 CN 3H-Indolium, 2-[2-[2-(9H-carbazol-9-yl)-3-[(1-ethyl-1,3-dihydro-3,3,5-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3,5-trimethyl-, hexafluorophosphate(1-)
 (9CI) (CA INDEX NAME)

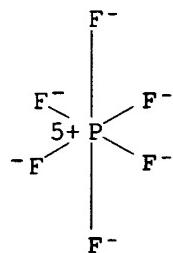
CM 1

CRN 669714-70-9
CMF C47 H50 N3

CM 2

CRN 16919-18-9
CMF F6 P

CCI CCS



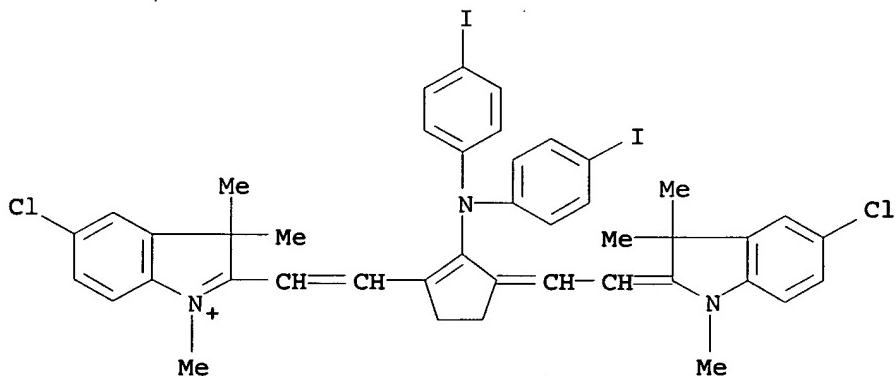
RN 779332-17-1 HCAPLUS

CN 3H-Indolium, 2-[2-[2-[bis(4-iodophenyl)amino]-3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-5-chloro-1,3,3-trimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 779332-16-0

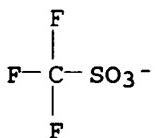
CMF C43 H40 Cl2 I2 N3



CM 2

CRN 37181-39-8

CMF C F3 O3 S



IC ICM G03F007-004

ICS G03F007-00; G03F007-028

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 41
 ST lithog plate dye IR laser absorption
 IT Lithographic plates
 (IR laser-sensitive neg.-working lithog. plate using
 specific dyes)
 IT Dyes
 (IR-absorbing; IR laser-sensitive neg.-working lithog
 . plate using specific dyes)
 IT 79-09-4D, Propionic acid, reaction products with dipentaerythritol
 pentaacrylate 56347-72-9 60506-81-2D, Dipentaerythritol
 pentaacrylate, reaction products with propionic acid 83045-04-9,
 Kayarad D 310 134127-48-3 155614-01-0
 183745-11-1 260967-26-8 313344-60-4 449762-40-7
 460337-34-2 667888-56-4 669714-62-9
 669714-63-0 669714-65-2 669714-67-4
 669714-71-0 669714-73-2 669714-76-5
 779332-17-1 779332-19-3 779332-20-6 780755-67-1
 781628-97-5, U 410
 (IR laser-sensitive neg.-working lithog. plate using
 specific dyes)
 IT 3584-23-4 104222-30-2 287925-54-6 761432-16-0 779332-21-7
 (radical polymerization initiator; IR
 laser-sensitive neg.-working lithog. plate using
 specific dyes)

L36 ANSWER 10 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2004:801612 HCPLUS
 DOCUMENT NUMBER: 141:304332
 TITLE: Polymerizable compositions with
 excellent IR sensitivity and wear-resistant
 lithographic printing plates using
 them
 INVENTOR(S): Shimada, Kazuto; Kunita, Kazuto
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 93 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2004271692	A2	<u>20040930</u>	JP 2003-59806	2003 0306
PRIORITY APPLN. INFO.:			JP 2003-59806	2003 0306

OTHER SOURCE(S): MARPAT 141:304332
 AB The compns., useful for direct platemaking, contain
 radical polymerization initiators and compds.
 Z(Ar1CR1:CCH2)n (Ar1 = arylene, divalent heterocycle; R1 = H, C1-6
 alkyl; Z = organic linking group with valence of n; n = 1-20), thus
 giving images with no defects.
 IT 761432-01-3 761432-02-4
 (IR absorber; addition-polymerizable compns. containing
 ethylenically unsatd. compds. for presensitized neg.)

lithog. plates with good wear resistance)

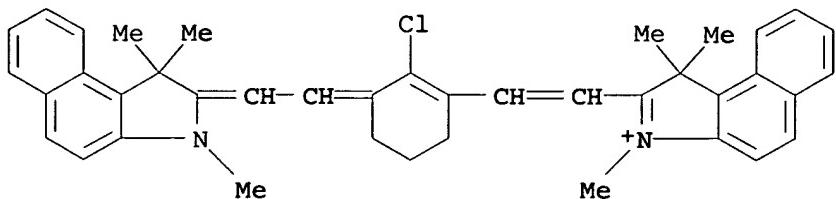
RN 761432-01-3 HCPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 134127-47-2

CMF C40 H40 Cl N2

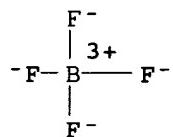


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



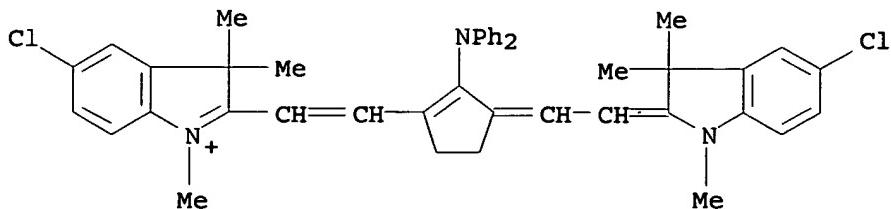
RN 761432-02-4 HCPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

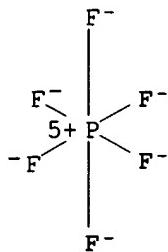
CRN 110992-86-4

CMF C43 H42 Cl2 N3



CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS



- IC ICM G03F007-027
 ICS G03F007-00; G03F007-004; G03F007-038
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38
 ST lithog plate printing dot wear resistance; addn polymn ethylenic compd direct platemaking; cyanine dye IR absorber
 lithog plate
 IT Optical materials
 (IR absorbers, cyanine dye; addition-polymerizable compns containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT IR materials
 (absorbers, cyanine dye; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT Lithographic plates
 (neg.-working presensitized; addition-polymerizable compns containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT 761432-01-3 761432-02-4
 (IR absorber; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT 107935-24-0, Allyl methacrylate-methacrylic acid-methyl methacrylate copolymer 761432-20-6
 (binder; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT 116237-20-8 225239-26-9 761432-03-5 761432-04-6
 761432-05-7 761432-07-9 761432-08-0 761432-10-4
 761432-11-5 761432-12-6 761432-14-8
 (polymerizable compound; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg.
 lithog. plates with good wear resistance)
 IT 3584-23-4 761432-16-0 761432-18-2
 (radical generator; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg. lithog. plates with good wear resistance)
 IT 7429-90-5, Aluminum, uses
 (support; addition-polymerizable compns. containing ethylenically unsatd. compds. for presensitized neg.

lithog. plates with good wear resistance)

L36 ANSWER 11 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:798784 HCAPLUS

DOCUMENT NUMBER: 141:304324

TITLE:

Polymerizable compositions

containing certain cyanine dyes with excellent storage stability and IR sensitivity and presensitized lithographic plates using them

INVENTOR(S): Shimada, Kazuto

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 65 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004271594	A2	20040930	JP 2003-58410	2003 0305
			JP 2003-58410	2003 0305

PRIORITY APPLN. INFO.:

AB The compns., useful for direct platemaking, contain cyanine dyes (maximum absorption at 700-1200 nm) with inorg. counter anions, radical generators, and polymerizable unsatd. compds., thus giving images with no fogging.

IT 110992-87-5 188745-11-1 193687-63-7
197087-00-6 761305-91-3 761305-98-0
761306-09-6 761306-17-6 761306-27-8
(cyanine dye; polymerizable compns. containing certain cyanine dyes with good storage stability and IR sensitivity for presensitized lithog. plates)

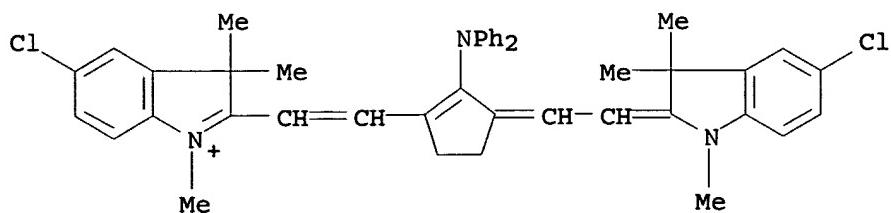
RN 110992-87-5 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethyldene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-)
(9CI) (CA INDEX NAME)

CM 1

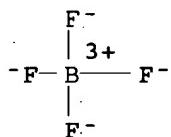
CRN 110992-86-4

CMF C43 H42 Cl2 N3



CM 2

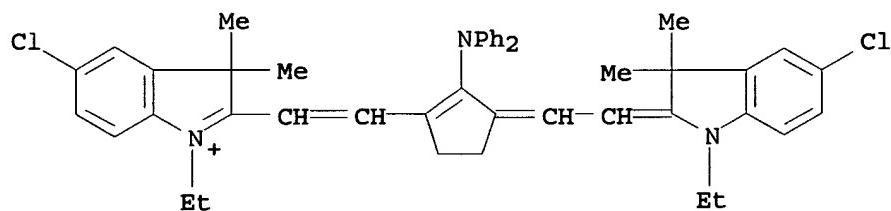
CRN 14874-70-5
 CMF B F4
 CCI CCS



RN 183745-11-1 HCAPLUS
 CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

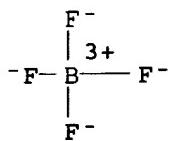
CM 1

CRN 162717-38-6
 CMF C45 H46 Cl2 N3



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



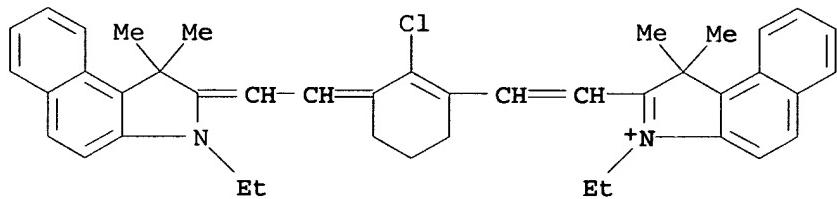
RN 193687-63-7 HCPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(3-ethyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-ethyl-1,1-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 193687-62-6

CMF C42 H44 Cl N2

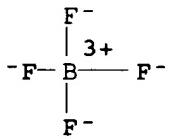


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



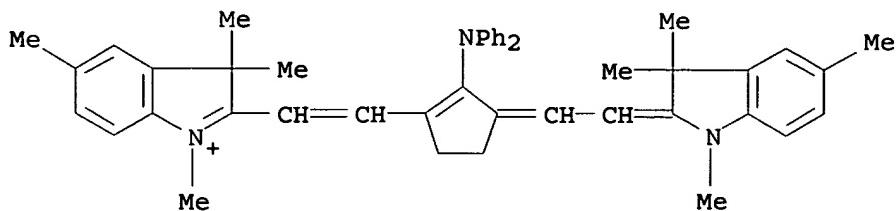
RN 197087-00-6 HCPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3,5-tetramethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3,5-tetramethyl-, perchlorate (9CI) (CA INDEX NAME)

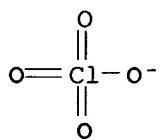
CM 1

CRN 183745-00-8

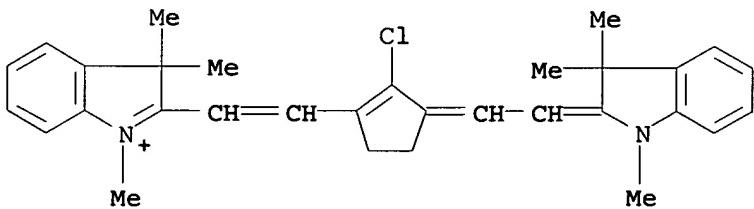
CMF C45 H48 N3



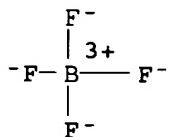
CM 2

CRN 14797-73-0
CMF Cl O4RN 761305-91-3 HCAPLUS
CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 69415-29-8
CMF C31 H34 Cl N2

CM 2

CRN 14874-70-5
CMF B F4
CCI CCS

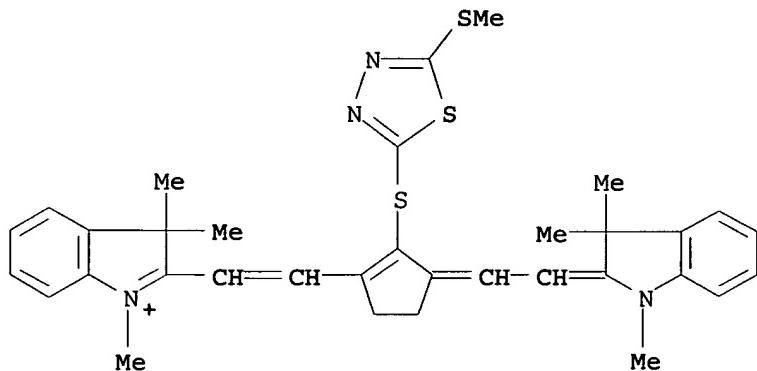
RN 761305-98-0 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[5-(methylthio)-1,3,4-thiadiazol-2-yl]thio]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 328063-87-2

CMF C34 H37 N4 S3

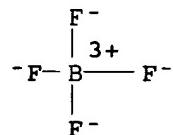


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



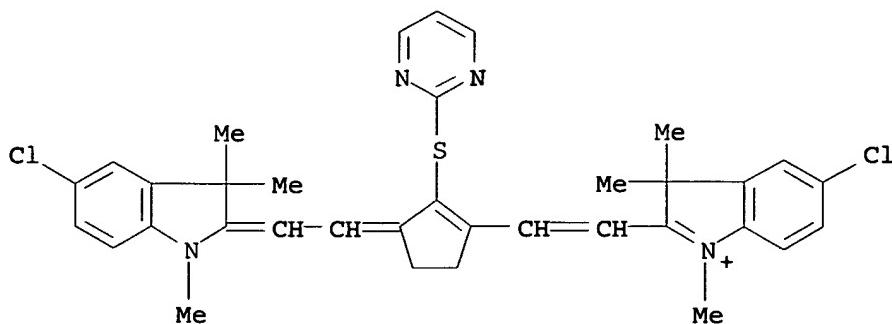
RN 761306-09-6 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(2-pyrimidinylthio)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 761306-08-5

CMF C35 H35 Cl2 N4 S

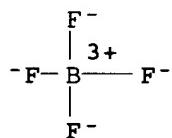


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



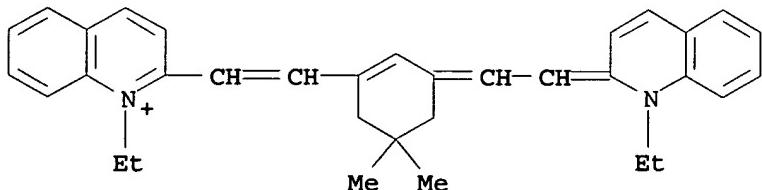
RN 761306-17-6 HCAPLUS

CN Quinolinium, 1-ethyl-2-[2-[3-[(1-ethyl-2(1H)-quinolinylidene)ethyliidene]-5,5-dimethyl-1-cyclohexen-1-yl]ethenyl]-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 761306-16-5

CMF C34 H37 N2

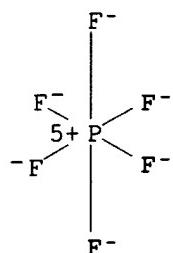


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



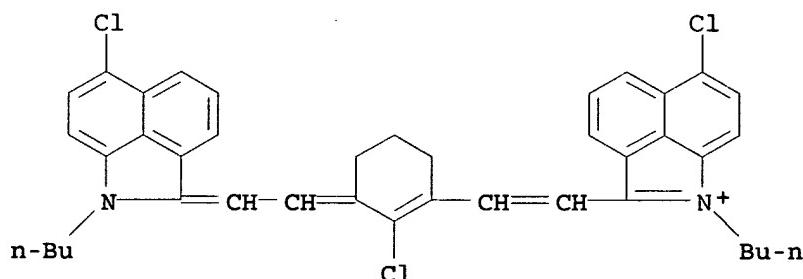
RN 761306-27-8 HCAPLUS

CN Benz[cd]indolium, 1-butyl-2-[2-[3-[(1-butyl-6-chlorobenz[cd]indol-2(1H)-ylidene)ethylidene]-2-chloro-1-cyclohexen-1-yl]ethenyl]-6-chloro-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 155613-97-1

CMF C40 H38 Cl3 N2

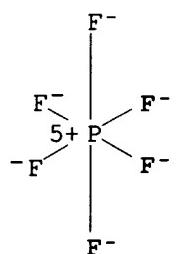


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



IC ICM G03F007-028

ICS C08F002-50; G03F007-00; G03F007-038

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST cyanine dye IR absorber polymerizable compn;

lithog plate cyanine counter anion bromide; storage
stability presensitized lithog printing plate

IT Cyanine dyes
(IR absorber; polymerizable compns. containing certain
cyanine dyes with good storage stability and IR sensitivity for
presensitized lithog. plates)

IT Optical materials
(IR absorbers, cyanine dye; polymerizable compns.
containing certain cyanine dyes with good storage stability and IR
sensitivity for presensitized lithog. plates)

IT IR materials
(absorbers, cyanine dye; polymerizable compns. containing
certain cyanine dyes with good storage stability and IR
sensitivity for presensitized lithog. plates)

IT Lithographic plates
(neg.-working presensitized; polymerizable compns.
containing certain cyanine dyes with good storage stability and IR
sensitivity for presensitized lithog. plates)

IT 761306-34-7 761306-43-8
(binder; polymerizable compns. containing certain cyanine
dyes with good storage stability and IR sensitivity for
presensitized lithog. plates)

IT 110992-87-5 183745-11-1 193687-63-7
197087-00-6 761305-91-3 761305-98-0
761306-09-6 761306-17-6 761306-27-8
(cyanine dye; polymerizable compns. containing certain
cyanine dyes with good storage stability and IR sensitivity for
presensitized lithog. plates)

IT 4986-89-4, Pentaerythritol tetraacrylate 29570-58-9,
Dipentaerythritol hexaacrylate
(polymerizable compound; polymerizable compns. containing
certain cyanine dyes with good storage stability and IR
sensitivity for presensitized lithog. plates)

IT 125428-43-5 253585-83-0 676349-80-7
(radical generator; polymerizable
compns. containing certain cyanine dyes with good storage
stability and IR sensitivity for presensitized lithog
. plates)

IT 7429-90-5, Aluminum, uses
(support; polymerizable compns. containing certain
cyanine dyes with good storage stability and IR sensitivity for
presensitized lithog. plates)

L36 ANSWER 12 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:693243 HCAPLUS

DOCUMENT NUMBER: 139:221635

TITLE: Photopolymerizable composition for
lithographic printing plate precursor

INVENTOR(S): Sugasaki, Atsushi; Kunita, Kazuto

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 51 pp.

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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EP 1341040 A1 20030903 EP 2003-4376

2003
0303

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE,
 MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ,
 EE, HU, SK

JP 2003252939 A2 20030910 JP 2002-55881

2002
0301

US 2003207204 A1 20031106 US 2003-376257

2003
0303

PRIORITY APPLN. INFO.:

JP 2002-55881

A
2002
0301

AB The present invention relates to a photopolymerizable composition useful in stereolithog. holog. image forming materials; particularly relates to a photopolymerizable resin composition suited for use in a lithog. printing plate precursor capable of direct platemaking based on digital data from a computer. A photopolymerizable composition comprises a polymer having a radical polymerizable group and a unit represented by $\text{RaC}(\text{RbX}_1)\text{CQ}_1\text{CH}_2$ (Q_1 = cyano group, COX_2 ; $\text{X}_1,2$ = -R-, halogen atom; R = hetero atom; Ra,b = H, halogen atom, cyano group, organic residual group; X_1 and X_2 may be taken together to form a cyclic structure; R1 and Rb may be taken together to form a cyclic structure; X1 and Ra or Rb may be taken together to form a cyclic structure).

IT 443919-35-5

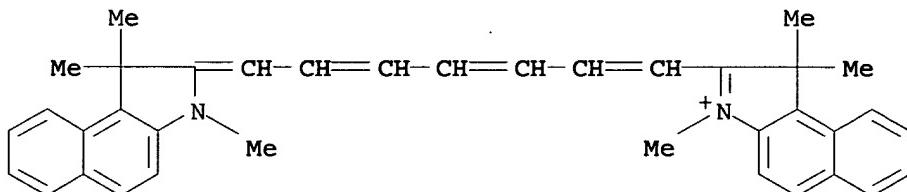
(photopolymn. initiator; photopolymerizable composition for lithog. printing plate precursor)

RN 443919-35-5 HCAPLUS**CN** 1H-Benz[e]indolium, 2-[7-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3,5-heptatrienyl]-1,1,3-trimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47809-39-2

CMF C37 H37 N2

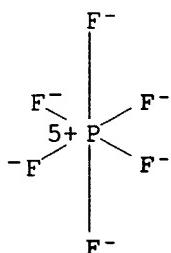


CM 2

CRN 16919-18-9

CMF F6 P

CCI CCS



IC ICM G03F007-038
 ICS B41C001-10; B41M005-40
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38
 ST photopolymerizable compn lithog printing plate precursor
 IT Holography
 Lithographic plates
 Stereolithography
 (photopolymerizable composition for)
 IT Polymerization
 (photopolymn.; photopolymerizable composition for lithog. printing plate precursor)
 IT 590419-07-1P
 (photopolymerizable composition for lithog. printing plate precursor)
 IT 590419-04-8 590419-09-3 590419-11-7 590419-13-9
 590419-14-0 590419-15-1 590419-17-3
 (photopolymerizable composition for lithog. printing plate precursor)
 IT 4986-89-4, Pentaerythritol tetraacrylate 29570-58-9,
 DiPentaerythritol hexaacrylate 590419-29-7
 (photopolymerizable composition for lithog. printing plate precursor)
 IT 125051-32-3, CGI-784 293329-25-6 304882-18-6
443919-35-5 539854-53-0 590419-18-4 590419-19-5
 590419-20-8 590419-21-9 590419-23-1 590419-25-3
 590419-27-5 590419-28-6 591204-66-9
 (photopolymn. initiator; photopolymerizable composition for lithog. printing plate precursor)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 13 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:505026 HCPLUS
 DOCUMENT NUMBER: 140:199795
 TITLE: What affects the rate of free radical polymerization of a multifunctional acrylate photoinitiated by cyanine borate salts? Part II. Application of electron transfer theory
 AUTHOR(S): Kabatc, Janina; Paczkowski, Jerzy; Karolczak, Jerzy
 CORPORATE SOURCE: Fac. of Chem. Technol. and Eng., Univ. of Technol. and Agriculture, Bydgoszcz, 85-326, Pol.

SOURCE: Polimery (Warsaw, Poland) (2003), 48(6),
425-433
CODEN: POLIA4; ISSN: 0032-2725

PUBLISHER: Instytut Chemii Przemyslowej
DOCUMENT TYPE: Journal
LANGUAGE: English

AB On the basis of Schuster's investigation, a mechanism of the processes going on during radical polymerization of trimethylolpropane triacrylate, photoinitiated by cyanine borate salts, was proposed. As well the possibility of Marcus theory application to describe the kinetics of such polymerization, photoinitiated via electron transfer process, has been presented. It required the determination of the value of free energy of activation of electron transfer process (ΔG_{el}) using Rehm-Weller equation. Using cyclic voltammetry the reduction potentials of the dyes and oxidation potentials of borate salts were determined. Parabolic dependence between polymerization rate (R_p) and ΔG value has been obtained for all the salts tested. The lifetimes of excited singlet state of cyanine dye with and without quenching were determined and let calculate the rate consts. of primary process of polymerization investigated, i.e. electron transfer from borate anion to excited state of the dye (kel). According to the Scheme A, the effect of competitive process, i.e. cyanine and Bu radicals recombination on the photoinitiated polymerization rate was also determined. This process, which does not influence R_p value, leads to the dye bleaching what strongly depends on the structure of both dye cation and borate anion. Initiation rate of polymerization depends on the photoinitiator concentration and R_p value - on the coinitiator concentration.

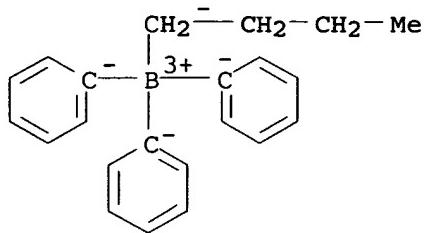
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423766-20-5 423766-36-3 423766-37-4
423766-39-6 423766-41-0 423766-42-1
660815-15-6 660815-16-7 660815-17-8
660815-18-9 660815-25-8 660815-26-9
660815-27-0 660815-30-5 660815-33-8
660815-34-9 660815-41-8 660815-42-9
660815-43-0 660815-44-1 660815-45-2
660815-47-4 660815-48-5 660815-49-6
660815-50-9 660815-58-7 660815-59-8
(electron transfer theory in free radical polymerization of trimethylolpropane triacrylate photoinitiated by cyanine borate salts)

RN 209456-61-1 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-phenyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

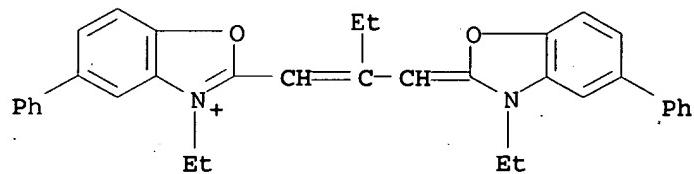
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CRN 47252-39-1
CMF C22 H24 B
CCI CCS



CM 2

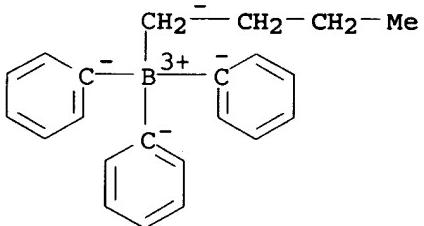
CRN 17694-05-2
 CMF C35 H33 N2 O2



RN 209456-65-5 HCPLUS
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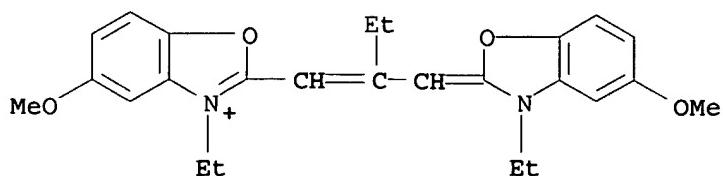
CM 1

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



CM 2

CRN 42986-11-8
 CMF C25 H29 N2 O4



RN 211676-25-4 HCPLUS

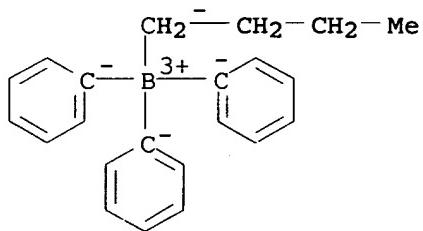
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-2-(3H)-benzothiazolylidene)methyl]-1-butenyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47252-39-1

CMF C22 H24 B

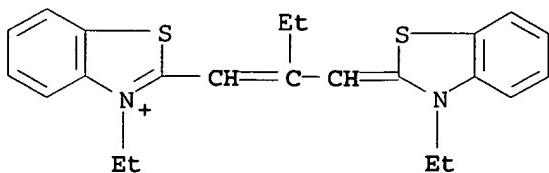
CCI CCS



CM 2

CRN 35077-88-4

CMF C23 H25 N2 S2



RN 423766-13-6 HCPLUS

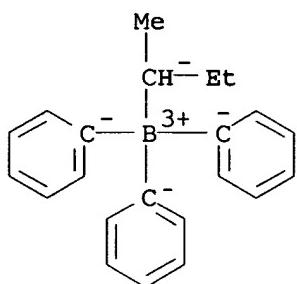
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2-(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methoxy-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

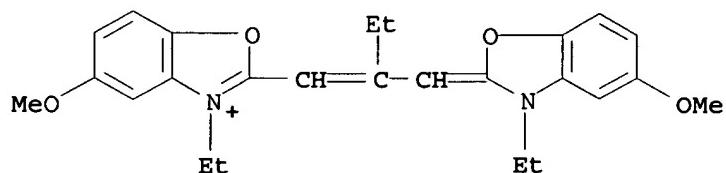
CRN 135539-45-6

CMF C22 H24 B

CCI CCS



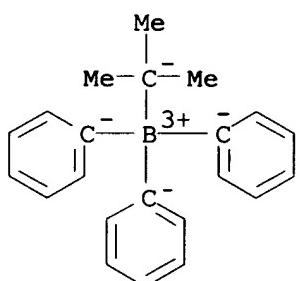
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CRN 42986-11-8
CMF C25 H29 N2 O4

RN 423766-15-8 HCAPLUS

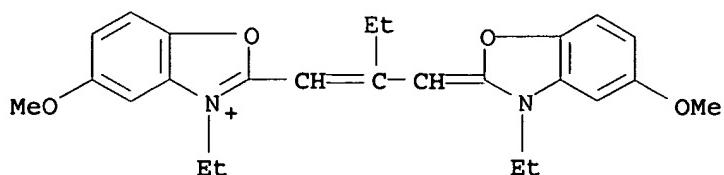
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methoxy-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4
CMF C22 H24 B
CCI CCS

CM 2

CRN 42986-11-8
CMF C25 H29 N2 O4



RN 423766-16-9 HCAPLUS

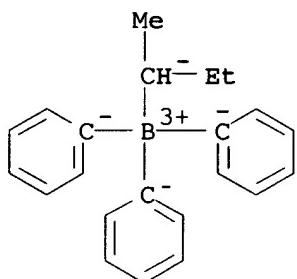
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-phenyl-, (T-4)-(1-methylpropyl)trifluoromethylbenzoxazolium (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

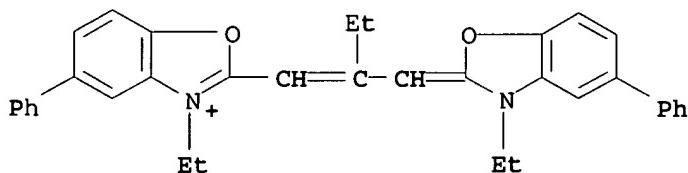
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CM 2

CRN 17694-05-2

CMF C35 H33 N2 O2



RN 423766-17-0 HCAPLUS

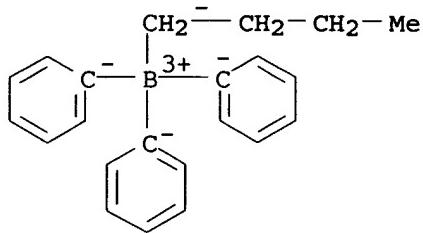
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, (T-4)-butyltrifluoromethylbenzoxazolium (9CI) (CA INDEX NAME)

CM 1

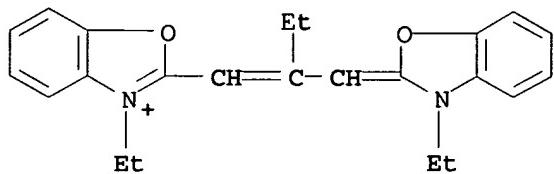
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CMF C22 H24 B

CCI CCS

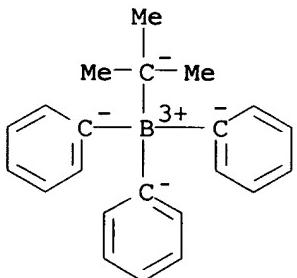


CM 2

CRN 39039-90-2
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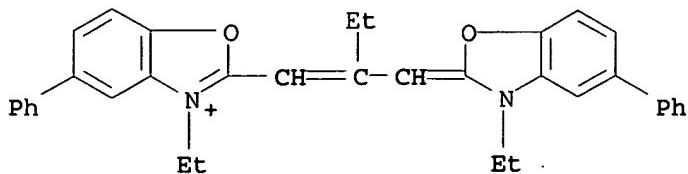
RN 423766-18-1 HCAPLUS
 CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-phenyl-,
 (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4
CMF C22 H24 B
CCI CCS

CM 2

CRN 17694-05-2
CMF C35 H33 N2 O2



RN 423766-19-2 HCPLUS

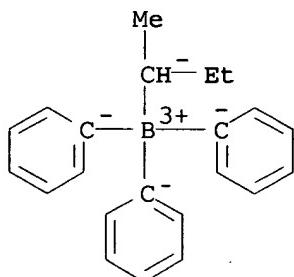
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

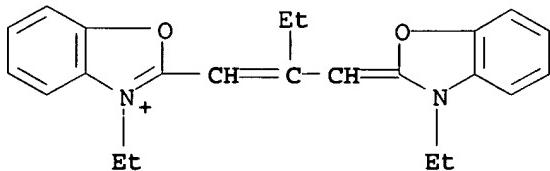
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CM 2

CRN 39039-90-2

CMF C23 H25 N2 O2



RN 423766-20-5 HCPLUS

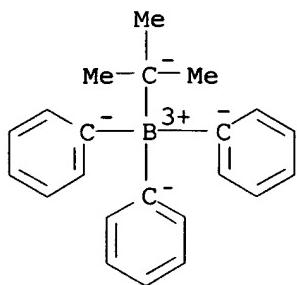
CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4

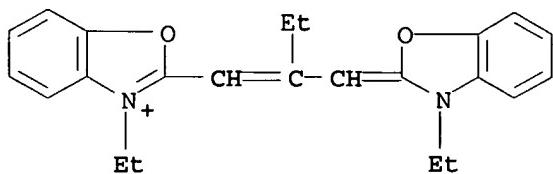
CMF C22 H24 B

CCI CCS



CM 2

CRN 39039-90-2
CMF C23 H25 N2 O2

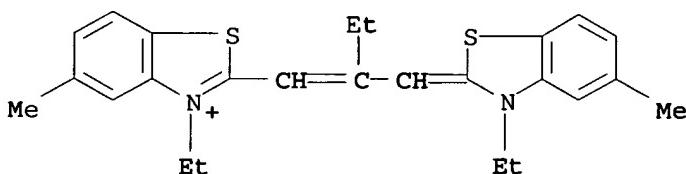


RN 423766-36-3 HCAPLUS

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(T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

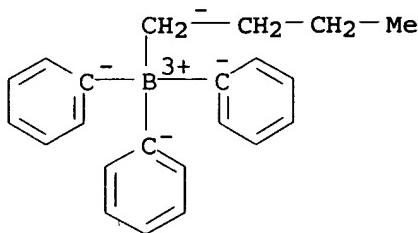
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CRN 48221-96-1
CMF C25 H29 N2 S2



CM 2

CRN 47252-39-1
CMF C22 H24 B
CCI CCS



RN 423766-37-4 HCPLUS

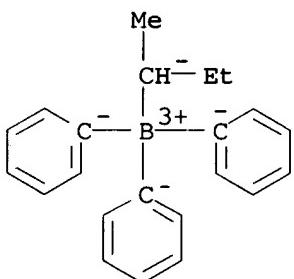
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methyl-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

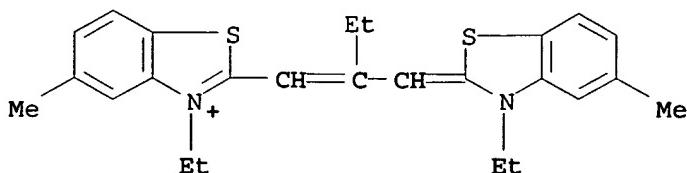
CCI CCS



CM 2

CRN 48221-96-1

CMF C25 H29 N2 S2



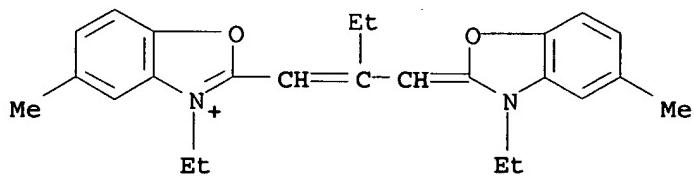
RN 423766-39-6 HCPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methyl-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

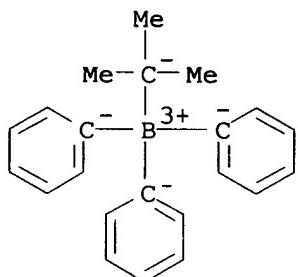
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CM 2

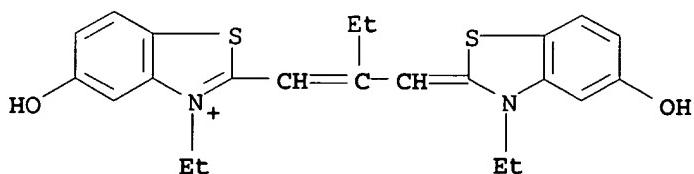
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 CCI CCS



RN 423766-41-0 HCAPLUS
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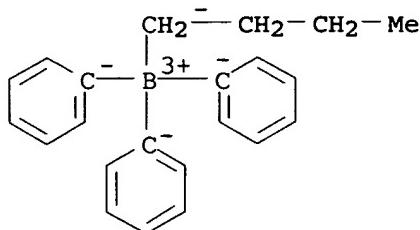
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CM 2

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



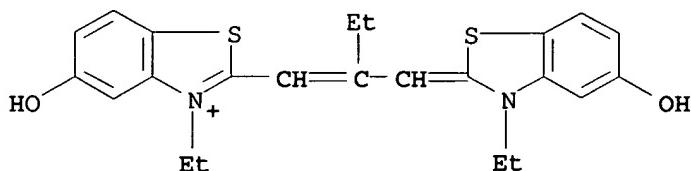
RN 423766-42-1 HCPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-hydroxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-hydroxy-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-40-9

CMF C23 H25 N2 O2 S2

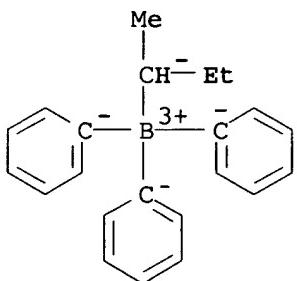


CM 2

CRN 135539-45-6

CMF C22 H24 B

CCI CCS



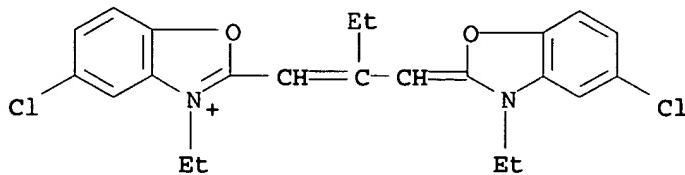
RN 660815-15-6 HCPLUS

CN Benzoxazolium, 5-chloro-2-[2-[(5-chloro-3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-3-ethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

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CRN 52963-38-9

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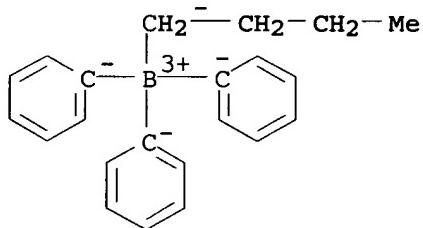


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



RN 660815-16-7 HCPLUS

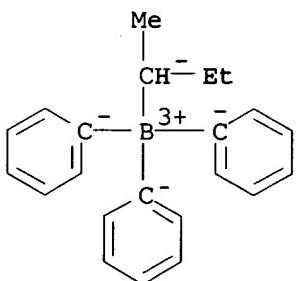
CN Benzoxazolium, 5-chloro-2-[2-[(5-chloro-3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-but enyl]-3-ethyl-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

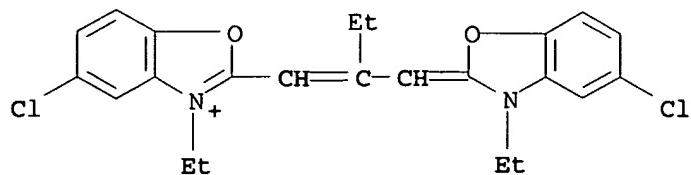
CCI CCS



CM 2

CRN 52963-38-9

CMF C23 H23 Cl2 N2 O2



RN 660815-17-8 HCAPLUS

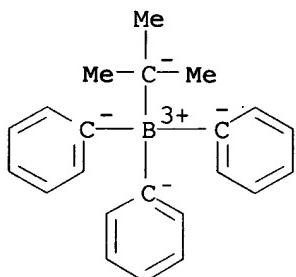
CN Benzoxazolium, 5-chloro-2-[2-[(5-chloro-3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-but enyl]-3-ethyl-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4

CMF C22 H24 B

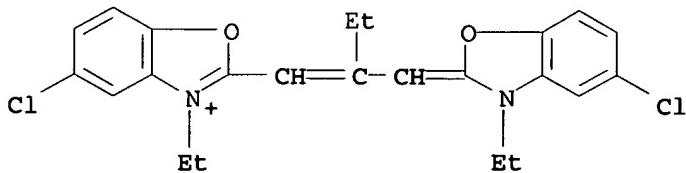
CCI CCS



CM 2

CRN 52963-38-9

CMF C23 H23 Cl2 N2 O2



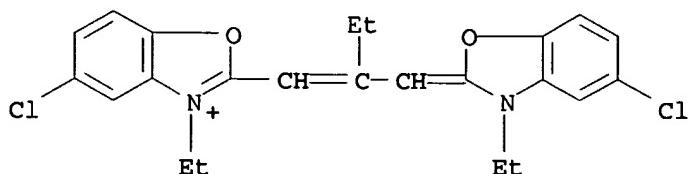
RN 660815-18-9 HCAPLUS

CN Benzoxazolium, 5-chloro-2-[2-[(5-chloro-3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-but enyl]-3-ethyl-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 52963-38-9

CMF C23 H23 Cl2 N2 O2

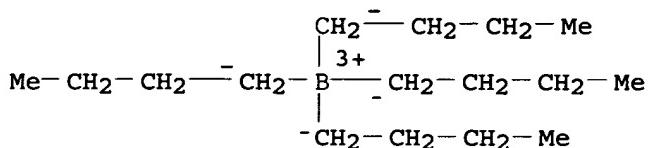


CM 2

CRN 24651-47-6

CMF C16 H36 B

CCI CCS



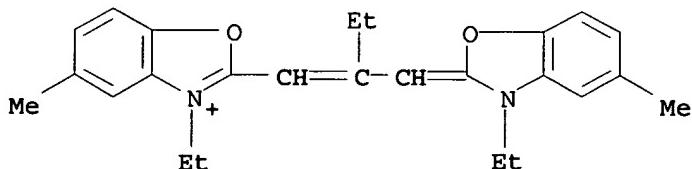
RN 660815-25-8 HCPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzoxazolylidene)methyl]-1-but enyl]-5-methyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-38-5

CMF C25 H29 N2 O2

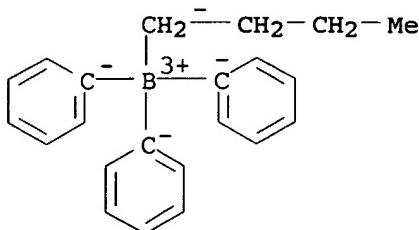


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



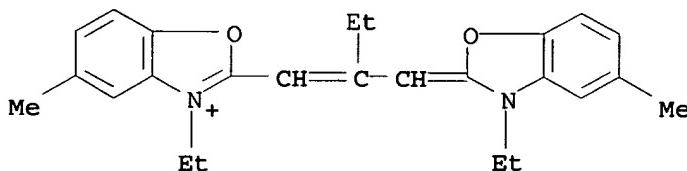
RN 660815-26-9 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methyl-,
(T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-38-5

CMF C25 H29 N2 O2

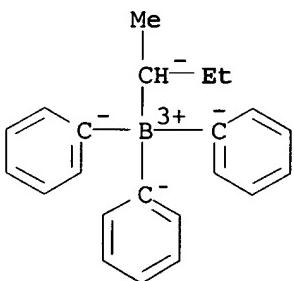


CM 2

CRN 135539-45-6

CMF C22 H24 B

CCI CCS



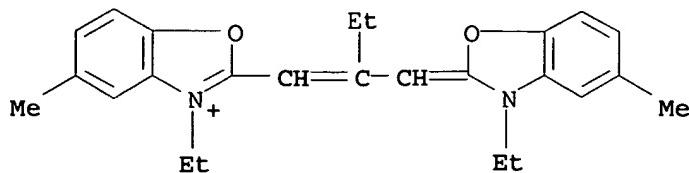
RN 660815-27-0 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methyl-,
tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-38-5

CMF C25 H29 N2 O2

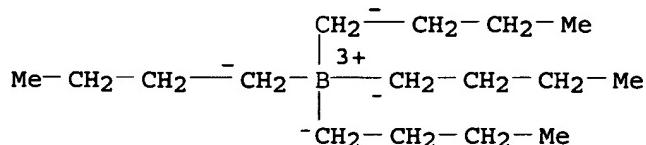


CM 2

CRN 24651-47-6

CMF C16 H36 B

CCI CCS



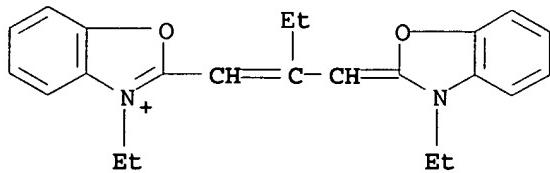
RN 660815-30-5 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 39039-90-2

CMF C23 H25 N2 O2

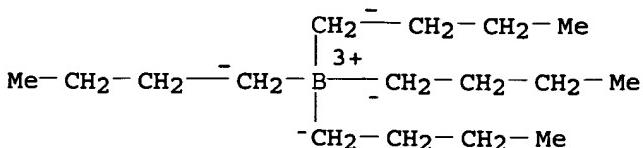


CM 2

CRN 24651-47-6

CMF C16 H36 B

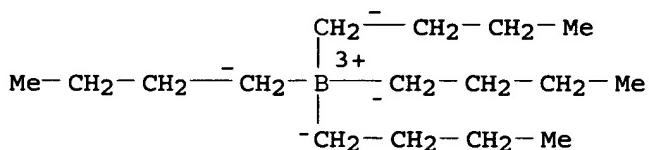
CCI CCS



RN 660815-33-8 HCPLUS
 CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-phenyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-phenyl-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

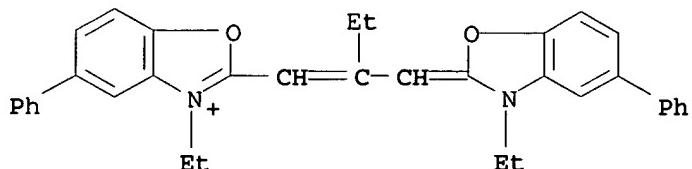
CM 1

CRN 24651-47-6
 CMF C16 H36 B
 CCI CCS



CM 2

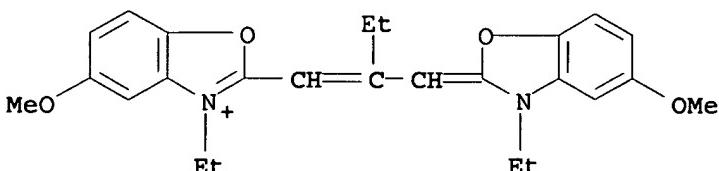
CRN 17694-05-2
 CMF C35 H33 N2 O2



RN 660815-34-9 HCPLUS
 CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-5-methoxy-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

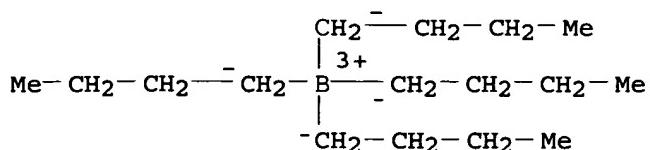
CRN 42986-11-8
 CMF C25 H29 N2 O4



CM 2

CRN 24651-47-6
 CMF C16 H36 B

CCI CCS



RN 660815-41-8 HCAPLUS

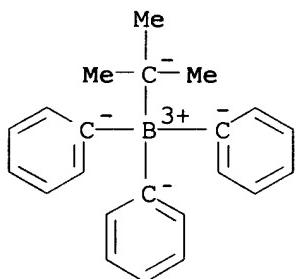
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methyl-,
(T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4

CMF C22 H24 B

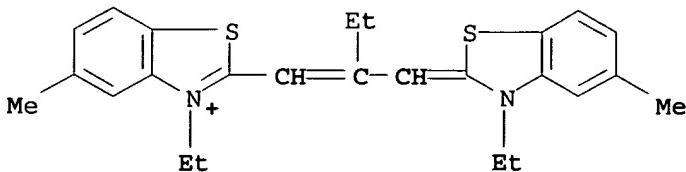
CCI CCS



CM 2

CRN 48221-96-1

CMF C25 H29 N2 S2



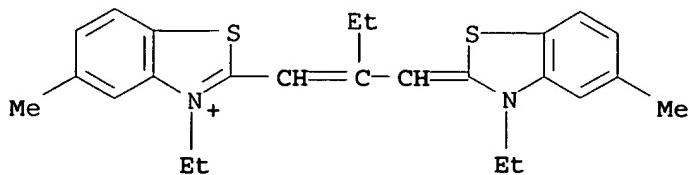
RN 660815-42-9 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methyl-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 48221-96-1

CMF C25 H29 N2 S2

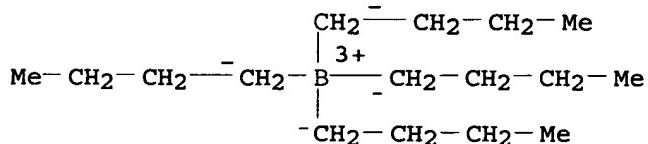


CM 2

CRN 24651-47-6

CMF C16 H36 B

CCI CCS



RN 660815-43-0 HCAPLUS

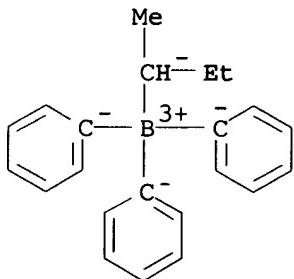
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

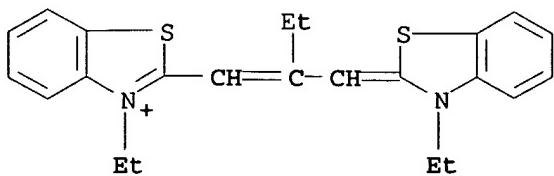
CCI CCS



CM 2

CRN 35077-88-4

CMF C23 H25 N2 S2



RN 660815-44-1 HCPLUS

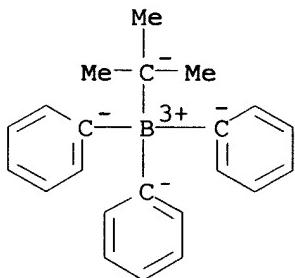
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 160016-02-4

CMF C22 H24 B

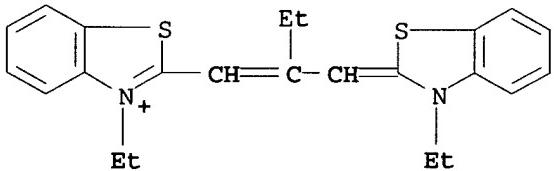
CCI CCS



CM 2

CRN 35077-88-4

CMF C23 H25 N2 S2



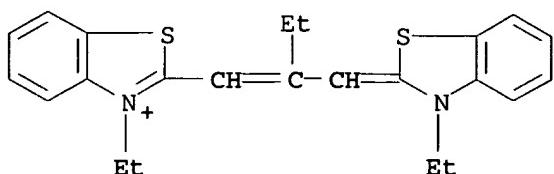
RN 660815-45-2 HCPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 35077-88-4

CMF C23 H25 N2 S2

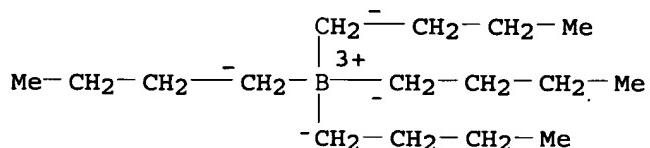


CM 2

CRN 24651-47-6

CMF C16 H36 B

CCI CCS



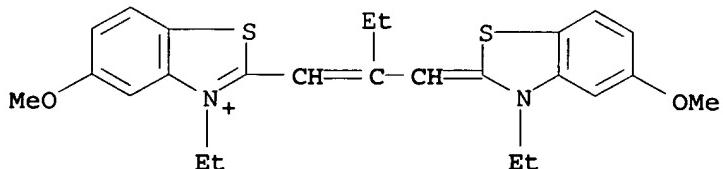
RN 660815-47-4 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methoxy-,
(T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 52812-18-7

CMF C25 H29 N2 O2 S2

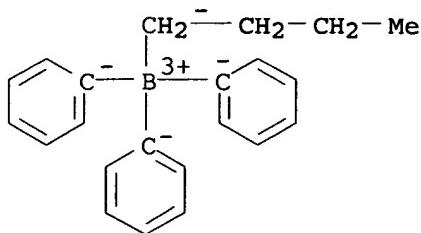


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



RN 660815-48-5 HCPLUS

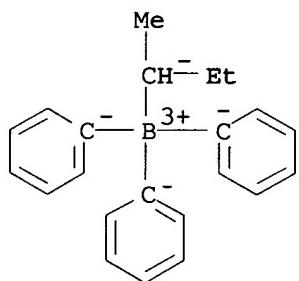
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methoxy-, (T-4)-(1-methylpropyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 135539-45-6

CMF C22 H24 B

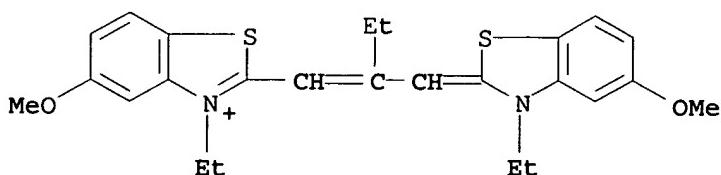
CCI CCS



CM 2

CRN 52812-18-7

CMF C25 H29 N2 O2 S2



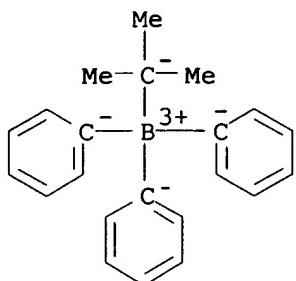
RN 660815-49-6 HCPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methoxy-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

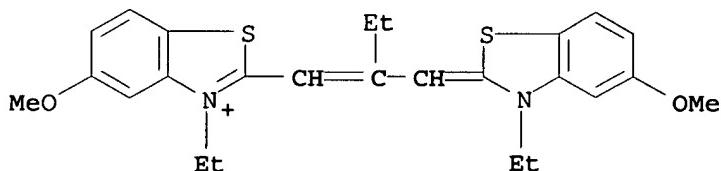
CRN 160016-02-4

CMF C22 H24 B
CCI CCS



CM 2

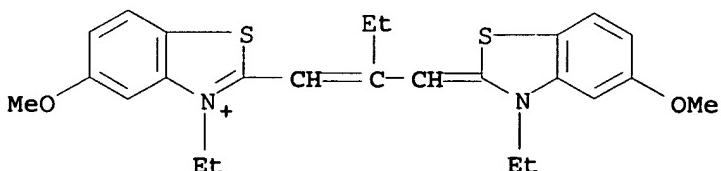
CRN 52812-18-7
CMF C25 H29 N2 O2 S2



RN 660815-50-9 HCAPLUS
CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-methoxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-methoxy-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

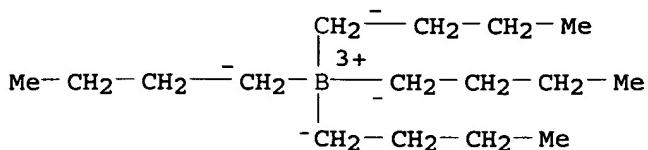
CM 1

CRN 52812-18-7
CMF C25 H29 N2 O2 S2



CM 2

CRN 24651-47-6
CMF C16 H36 B
CCI CCS



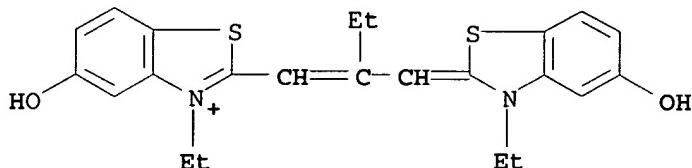
RN 660815-58-7 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-hydroxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-hydroxy-, (T-4)-(1,1-dimethylethyl)triphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-40-9

CMF C23 H25 N2 O2 S2

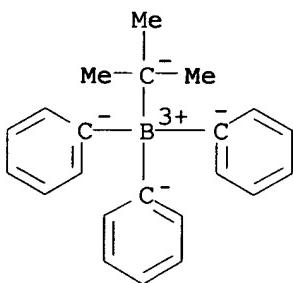


CM 2

CRN 160016-02-4

CMF C22 H24 B

CCI CCS



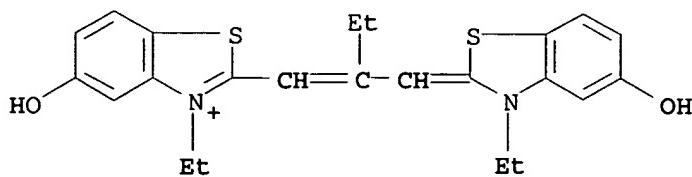
RN 660815-59-8 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-5-hydroxy-2(3H)-benzothiazolylidene)methyl]-1-butenyl]-5-hydroxy-, tetrabutylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 423766-40-9

CMF C23 H25 N2 O2 S2

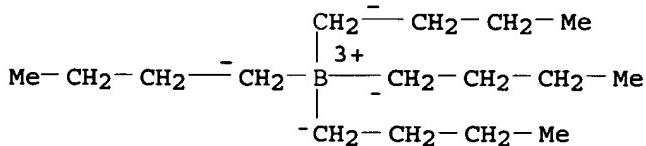


CM 2

CRN 24651-47-6

CMF C16 H36 B

CCI CCS



CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 41

ST cyanine dye borate initiated trimethylolpropane triacrylate polymer kinetics; electron transfer theory cyanine dye borate initiated polymer kinetics

IT Cyanine dyes

Electron transfer

Electron transfer kinetics

Free energy of activation

(electron transfer theory in free radical polymerization of trimethylolpropane triacrylate photoinitiated by cyanine borate salts)

IT Polymerization kinetics

(photochem., radical; electron transfer theory in free radical polymerization of trimethylolpropane triacrylate photoinitiated by cyanine borate salts)

IT 99635-76-4 99635-77-5 141563-95-3 179128-47-3 209456-58-6

209456-60-0 209456-61-1 209456-64-4

209456-65-5 209456-67-7 209456-70-2 209456-74-6

211676-25-4 303110-45-4 303110-51-2 303110-70-5

423118-09-6 423118-11-0 423765-86-0 423765-87-1

423765-88-2 423765-89-3 423765-92-8 423765-93-9

423765-94-0 423765-97-3 423765-98-4 423766-03-4

423766-04-5 423766-05-6 423766-06-7 423766-07-8

423766-08-9 423766-09-0 423766-10-3 423766-13-6

423766-15-8 423766-16-9 423766-17-0

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423766-33-0 423766-36-3 423766-37-4

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660815-16-7 660815-17-8 660815-18-9

660815-19-0 660815-21-4 660815-22-5 660815-23-6

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660815-27-0 660815-28-1 660815-29-2
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 660815-40-7 660815-41-8 660815-42-9
 660815-43-0 660815-44-1 660815-45-2
 660815-46-3 660815-47-4 660815-48-5
 660815-49-6 660815-50-9 660815-51-0
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 660815-56-5 660815-57-6 660815-58-7
660815-59-8 660815-60-1 660815-61-2 660815-62-3
 660815-63-4 660815-64-5 660815-65-6

(electron transfer theory in free radical
 polymerization of trimethylolpropane triacrylate
 photoinitiated by cyanine borate salts)

IT 15625-89-5, Trimethylolpropane triacrylate
 (electron transfer theory in free radical
 polymerization of trimethylolpropane triacrylate
 photoinitiated by cyanine borate salts)

REFERENCE COUNT: 18 THERE ARE 18 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

L36 ANSWER 14 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:432983 HCAPLUS

DOCUMENT NUMBER: 139:14994

TITLE: Heat-sensitive composition and
 lithographic original plate containing
 it

INVENTOR(S): Shimada, Kazuto; Kunita, Kazuto; Sorori,
 Tadahiro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2003162048	A2	<u>20030606</u>	JP 2001-360374	2001

1127

PRIORITY APPLN. INFO.: JP 2001-360374

2001
1127

AB The composition contains (A) a radical generating compound with decomposition temperature 140-270° and mol. weight ≥350 and (B) a compound whose chemical or phys. property irreversibly changes by the radical. The heat-mode lithog. original plate comprises a support coated with a recording layer containing (A), (B') a compound with polymerizable unsatd. group, (C) a light-to-heat converting agent, and (D) a binder polymer. The composition changes its property irreversibly by heating, and the plate shows high sensitivity and storage stability.

IT 182749-66-2 534570-57-5

(IR absorbent; heat-mode lithog. plate containing radical generator and polymerizable compound)

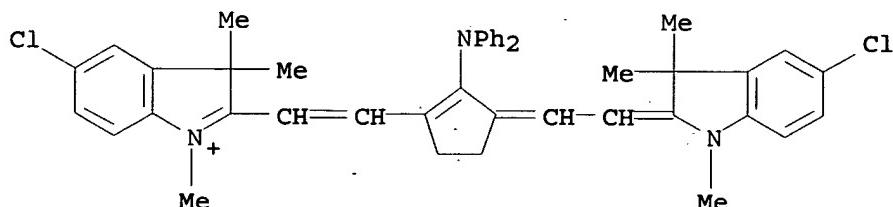
RN 182749-66-2 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 110992-86-4

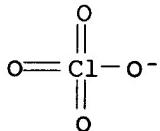
CMF C43 H42 Cl2 N3



CM 2

CRN 14797-73-0

CMF Cl O4



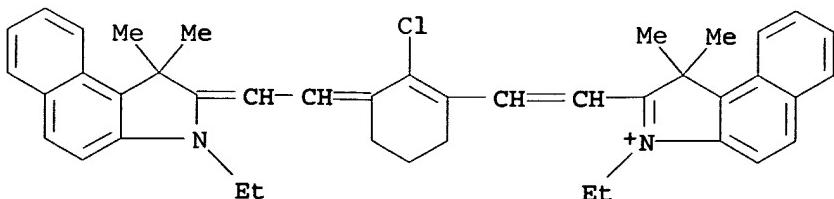
RN 534570-57-5 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(3-ethyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-ethyl-1,1-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

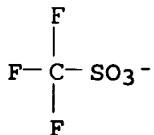
CM 1

CRN 193687-62-6

CMF C42 H44 Cl N2



CM 2

CRN 37181-39-8
CMF C F3 O3 S

- IC ICM G03F007-00
ICS G03F007-004; G03F007-029
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38
ST heat mode lithog plate; radical generator polymerizable compd heat sensitive compn
IT Polyurethanes, uses
(binder; heat-mode lithog. plate containing radical generator and polymerizable compound)
IT Lithographic plates
(heat-mode lithog. plate containing radical generator and polymerizable compound)
IT 182749-66-2 460337-34-2 534570-57-5
(IR absorbent; heat-mode lithog. plate containing radical generator and polymerizable compound)
IT 79-41-4D, Methacrylic acid, copolymers with allyl methacrylate and isopropylamides 96-05-9D, Allyl methacrylate, copolymers with isopropylamides and methacrylic acid 90216-38-9, Allyl methacrylate-methacrylic acid copolymer 293329-29-0, 2,2-Bis(hydroxymethyl) propionic acid-4,4'-diphenylmethane diisocyanate-hexamethylene diisocyanate-polypropylene glycol copolymer
(binder; heat-mode lithog. plate containing radical generator and polymerizable compound)
IT 104222-30-2 215253-67-1 241126-79-4 287925-54-6
359434-72-3 377780-83-1 377781-01-6 377781-17-4
377781-24-3 534570-56-4
(heat-mode lithog. plate containing radical generator and polymerizable compound)
IT 29570-58-9, Dipentaerythritol hexaacrylate 40220-08-4
(heat-mode lithog. plate containing radical generator and polymerizable compound)

L36 ANSWER 15 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:353722 HCAPLUS
 DOCUMENT NUMBER: 138:360441
 TITLE: Presensitized negative lithographic original plates and heat-sensitive radical generator compositions therefor
 INVENTOR(S): Shimada, Kazuto; Sorori, Tadahiro

PATENT ASSIGNEE(S) : Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 36 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003131360	A2	20030509	JP 2001-329129	2001 1026
PRIORITY APPLN. INFO.:				JP 2001-329129 2001 1026

OTHER SOURCE(S) : MARPAT 138:360441

AB The plates have photothermal conversion layers containing heat-sensitive radical generators RSO₂S-M+ [R = alk(en)yl, aryl, aralkyl, alkynyl; M+ = sulfonium, diazonium, iodonium, azinium], compds. which change chemical or phys. properties irreversibly upon reaction with radicals, and binder polymers.

IT 134127-48-3 442548-17-6
 (photothermal converters; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)

RN 134127-48-3 HCPLUS

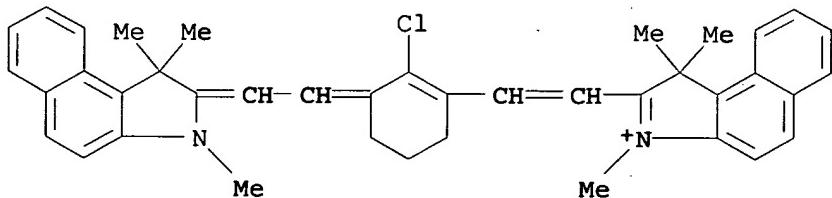
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethyldene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 134127-47-2

CMF C40 H40 Cl N2

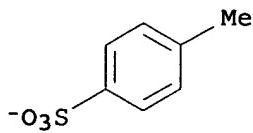
N



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



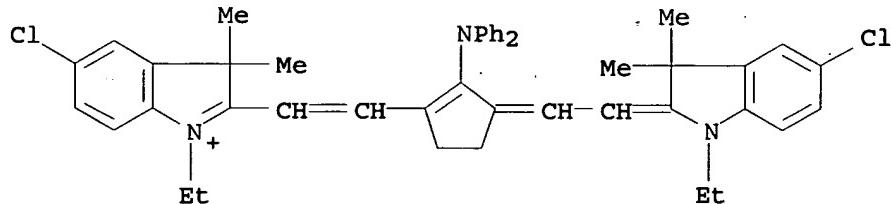
RN 442548-17-6 HCAPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with trifluoromethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 162717-38-6

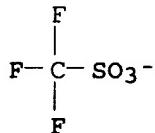
CMF C45 H46 Cl2 N3



CM 2

CRN 37181-39-8

CMF C F3 O3 S



IC ICM G03F007-00

ICS B41N001-14; G03F007-004; G03F007-028

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST presensitized lithog plate photothermal conversion layer sensitivity; heat mode laser platemaking PS plate sensitivity; iodonium sulfonium radical generator PS plate sensitivity

IT Polymerization catalysts
(photopolymn., heat-sensitive; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)IT Polyurethanes, uses
(polyoxyalkylene-, block; high-sensitive photopolymerizable compns. containing sp. onium-type radical

- generators for PS plates)
- IT Lithographic plates
 (presensitized; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT Onium compounds
 (radical generators; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT 37321-70-3, AA 1050
 (anodized, substrates; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT 822-06-ODP, Hexamethylene diisocyanate, adduct with glycerol dimethacrylate, polymer with allyl-containing acrylic polymers 1830-78-ODP, adduct with HMDI, polymers with allyl-containing acrylic polymers 90216-38-9DP, Allyl methacrylate-methacrylic acid copolymer, reaction products with HMDI-glycerol dimethacrylate adducts 182005-17-0P, Allyl methacrylate-methacrylic acid-pentaerythritol tetraacrylate copolymer 227098-90-ODP, Allyl methacrylate-N-isopropylacrylamide-methacrylic acid copolymer, reaction products with HMDI-glycerol dimethacrylate adducts 521086-23-7P, Allyl methacrylate-N-isopropylacrylamide-methacrylic acid-pentaerythritol tetraacrylate copolymer
 (high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT 246223-87-0, 2,2-Bis(hydroxymethyl)propionic acid-hexamethylene diisocyanate-MDI-polypropylene glycol block copolymer
 (high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT 134127-48-3 351195-63-6 442548-17-6
 (photothermal converters; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)
- IT 521086-24-8 521086-25-9 521086-27-1 521086-28-2
 521086-30-6 521086-32-8 521086-33-9 521086-35-1
 521086-37-3 521086-39-5
 (radical generators; high-sensitive photopolymerizable compns. containing sp. onium-type radical generators for PS plates)

L36 ANSWER 16 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2003:272162 HCAPLUS
 DOCUMENT NUMBER: 138:311588
 TITLE: Manufacture of IR-sensitive
 lithographic printing plate and
 lithographic printing master plate
 INVENTOR(S): Okamoto, Yasuo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----

JP 2003107682

A2 20030409

JP 2001-297069

2001
0927

PRIORITY APPLN. INFO.:

JP 2001-297069

2001
0927

AB The process comprises forming an image-forming layer on a support containing (a) an IR absorber, (b) a radical generator, (c) a radically polymerizable compound, (d) a binder polymer, and (e) a UV polymerization initiator containing a polymerizable unsatd. group, followed by IR imagewise exposure, development, and UV overall exposure. When the overall exposure is carried out, the plate is heated to 30-150°. The overall exposure and the imagewise exposure are carried out at the same exposure level.

IT 134127-48-3

(Manufacture of IR-sensitive lithog. printing plate)

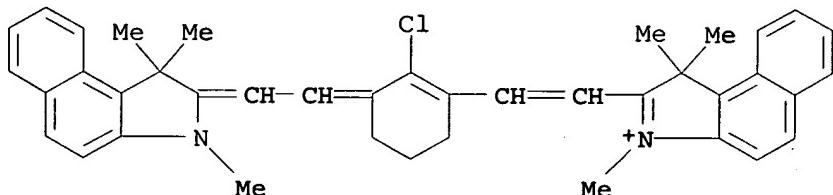
RN 134127-48-3 HCPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethyldene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 134127-47-2

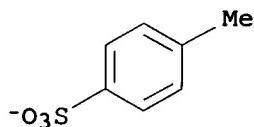
CMF C40 H40 Cl N2



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



IC ICM G03F007-00

ICS G03F007-004; G03F007-028; G03F007-40

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

ST IR sensitive lithog printing master plate

- IT Lithographic plates
 (composition of image-forming layer of IR-sensitive
 lithog. printing plate)
- IT Polymerization catalysts
 (photopolymn.; Manufacture of IR-sensitive lithog.
 printing plate)
- IT 67653-78-5, Dipentaerythritol hexaacrylate homopolymer
 90216-38-9, Allyl methacrylate-methacrylic acid copolymer
 134127-48-3
 (Manufacture of IR-sensitive lithog. printing plate)
- IT 125850-75-1 212203-57-1
 (photopolymn. initiator; Manufacture of IR-sensitive lithog.
 . printing plate)

L36 ANSWER 17 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:201564 HCPLUS
 DOCUMENT NUMBER: 138:245631
 TITLE: Photopolymerizable composition
 INVENTOR(S): Yanaka, Hiromitsu
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Eur. Pat. Appl., 30 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1291718	A2	20030312	EP 2002-20417	2002 0911
EP 1291718	A3	20031015	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK	
JP 2003177527	A2	20030627	JP 2002-264220	2002 0910
US 2003129524	A1	20030710	US 2002-237707	2002 0910
US 6890701	B2	20050510		
PRIORITY APPLN. INFO.:			JP 2001-275072	A 2001 0911

OTHER SOURCE(S): MARPAT 138:245631

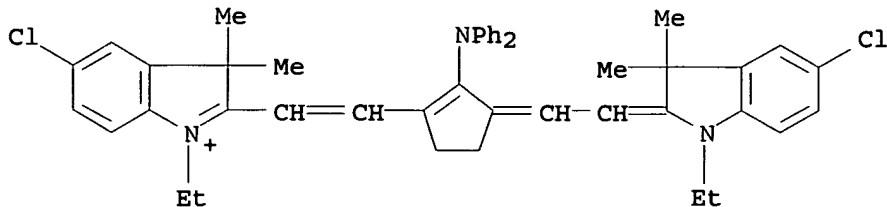
- AB The present invention relates to a photopolymerizable composition for neg.-working lithog. printing plate which comprises (A) a polymerizable compound having at least one radical-polymerizable ethylenically unsatd. double bond per mol. and a cohesive energy d. of not smaller than 500 J/cm³, (B) a radical polymerization initiator and (C) a binder polymer and cures when exposed to light.
- IT 501332-52-1
 (IR absorbent; photopolymerizable composition for neg.-working lithog. printing plates)
- RN 501332-52-1 HCPLUS

CN 3H-Indolium, 5-chloro-2-[2-[3-[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-yl]ethenyl]-1-ethyl-3,3-dimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 162717-38-6

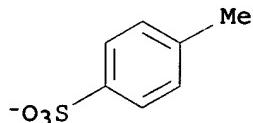
CMF C45 H46 Cl2 N3



CM 2

CRN 16722-51-3

CMF C7 H7 O3 S



IC ICM G03F007-029
ICS B41C001-10

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38

ST lithog printing plate photopolymerizable compn

IT Lithographic plates

(neg.-working presensitized; photopolymerizable compn
. for)

IT Photoimaging materials

(photopolymerizable; photopolymerizable composition for
neg.-working lithog. printing plates)

IT 385843-65-2 501332-52-1

(IR absorbent; photopolymerizable composition for
neg.-working lithog. printing plates)

IT 501332-57-6P 501332-58-7P

(binder; photopolymerizable composition for neg.-working
lithog. printing plates)

IT 90216-38-9, Allyl methacrylate-methacrylic acid copolymer
501347-46-2

(binder; photopolymerizable composition for neg.-working
lithog. printing plates)

IT 109479-99-4 168203-58-5 501332-54-3 501332-56-5

(photopolymerizable composition for neg.-working
lithog. printing plates)

IT 377780-83-1
 (polymerization initiator; photopolymerizable composition for
 neg.-working lithog. printing plates)

L36 ANSWER 18 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:904450 HCAPLUS

DOCUMENT NUMBER: 138:9681

TITLE: Developing solution composition and
 process for forming image using the
 composition

INVENTOR(S): Itakura, Ryosuke; Aoshima, Keitaro

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 34 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1260867	A1	20021127	EP 2002-11306	2002 0522
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2002351094	A2	20021204	JP 2001-152082	2001 0522
US 2003082478	A1	20030501	US 2002-151868	2002 0522
PRIORITY APPLN. INFO.:			JP 2001-152082	A 2001 0522

OTHER SOURCE(S): MARPAT 138:9681

AB The present invention relates to a developer composition for developing a lithog. printing plate having a neg. recording layer on which an image is recorded via an IR laser, the composition containing a nonionic surfactant, and a process for forming an image on a lithog. printing plate. The process comprises the steps of imagewise exposing a lithog. printing plate having a neg. recording layer on which an image is recorded via an IR ray and which contains an IR ray absorbent, a radical generator and a radically polymerizable compound, and then developing the lithog. printing plate with the developer composition containing a nonionic surfactant.

IT 134127-48-3

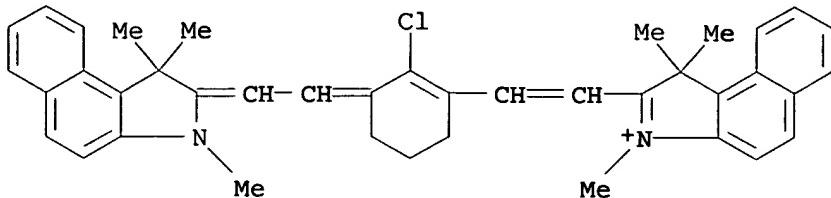
(IR absorbent; developing solution composition and process for forming image for lithog. printing plate containing)

RN 134127-48-3 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

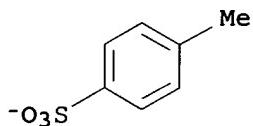
CM 1

CRN 134127-47-2
CMF C40 H40 Cl N2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S



- IC ICM G03F007-32
ICS B41C001-10
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST lithog printing plate developer nonionic surfactant
- IT Optical materials
(IR absorbers; developing solution composition and process for forming image for lithog. printing plate containing)
- IT IR materials
(absorbers; developing solution composition and process for forming image for lithog. printing plate containing)
- IT Lithographic plates
(developing solution composition and process for forming image for)
- IT Fatty acids, uses
(esters, with sorbitan, ethoxylated, nonionic surfactant; developing solution composition and process for forming image for lithog. printing plate containing)
- IT Polyoxyalkylenes, uses
(nonionic surfactant; developing solution composition and process for forming image for lithog. printing plate containing)
- IT Surfactants
(nonionic; developing solution composition and process for forming image for lithog. printing plate containing)
- IT 134127-48-3
(IR absorbent; developing solution composition and process for forming image for lithog. printing plate containing)
- IT 9003-11-6, Ethylene oxide-propylene oxide copolymer 12441-09-7D, Sorbitan, mono fatty carboxylate, ethoxylated 15520-05-5 25322-68-3, Polyethylene glycol 26027-38-3 27252-75-1, Polyethylene glycol mono octyl ether 28929-58-0 31017-83-1

31727-16-9 66988-47-4 75587-66-5 106392-12-5, Ethylene oxide-propylene oxide block copolymer 477309-22-1 477327-56-3
477327-61-0

(nonionic surfactant; developing solution composition and process for forming image for lithog. printing plate containing)

IT 262612-33-9

(radical generator; developing solution composition and process for forming image for lithog. printing plate containing)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 19 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:566563 HCAPLUS

DOCUMENT NUMBER: 137:132135

TITLE: Photopolymerization composition containing banding-preventing agent for light-sensitive lithographic printing precursor, and method for image formation therefor

INVENTOR(S): Okamoto, Hideaki

PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002214776	A2	20020731	JP 2001-347523	2001
				1113

PRIORITY APPLN. INFO.:	JP 2000-346085	A	DATE
			2000
			1114

AB The title composition contains ethylenic monomers, a photosensitizer dye absorbing 650-1,300 nm light, a radical generator, and a banding-preventing agent absorbing 650-1,300 nm light, wherein the photosensitizer has 90-110 % based on the amount (Wmax) providing maximum sensitizing and wherein the total amount of the photosensitizer and the banding-preventing agent is 110-1,000 % based on Wmax. The composition generates little banding due to leaked laser beam.

IT 193687-63-7

(banding-preventing agent in photopolymn. composition)

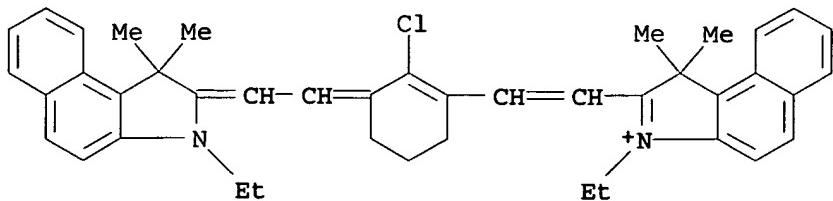
RN 193687-63-7 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(3-ethyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-3-ethyl-1,1-dimethyl-, tetrafluoroborate(1-) (9CI)
(CA INDEX NAME)

CM 1

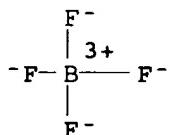
CRN 193687-62-6

CMF C42 H44 Cl N2



CM 2

CRN 14874-70-5
 CMF B F4
 CCI CCS



IC ICM G03F007-004
 ICS G03F007-004; G03F007-00
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST photopolymn compn banding light sensitive lithog printing precursor
 IT Light-sensitive materials
 Lithographic plates
 Photosensitizers, pharmaceutical
 (photopolymn. composition containing banding-preventing agent for light-sensitive lithog. printing precursor, and method for image formation therefor)
 IT 193687-63-7
 (banding-preventing agent in photopolymn. composition)
 IT 425380-40-1
 (photosensitizer in photopolymn. composition)

L36 ANSWER 20 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:538432 HCPLUS
 DOCUMENT NUMBER: 137:101449
 TITLE: Photopolymerizable compositions for near IR laser exposure and lithographic plates using them with excellent sensitivity and storage stability
 INVENTOR(S): Tsurutani, Yasuyuki; Toshimitsu, Eriko
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002202592	A2	20020719	JP 2001-75248	
				2001
				0316
PRIORITY APPLN. INFO.:			JP 2000-324902	A
				2000
				1025

OTHER SOURCE(S): MARPAT 137:101449

AB The compns. contain ethylenic monomers, photopolymer initiators (consisting of sensitizing dyes and radical generators, preferably) generating radicals by light with wavelength 600-1300 nm, and amine compds. having atomic groups NCH₂.

IT 328063-81-6
(sensitizing dye; amine-containing photopolymerizable compns. for lithog. plates with good near IR laser sensitivity and storage stability)

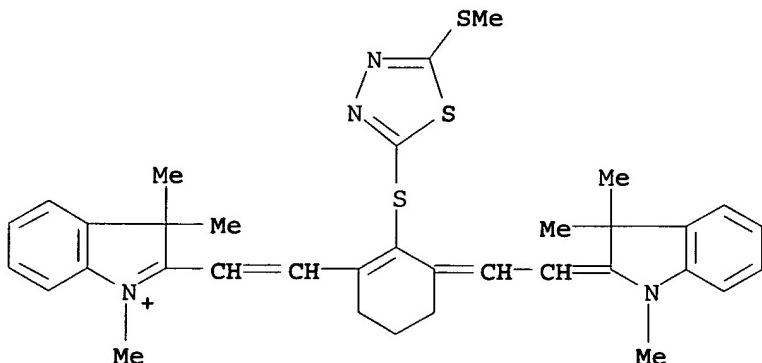
RN 328063-81-6 HCPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[[5-(methylthio)-1,3,4-thiadiazol-2-yl]thio]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI)
(CA INDEX NAME)

CM 1

CRN 328063-80-5

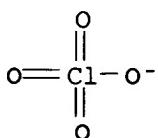
CMF C35 H39 N4 S3



CM 2

CRN 14797-73-0

CMF Cl O4

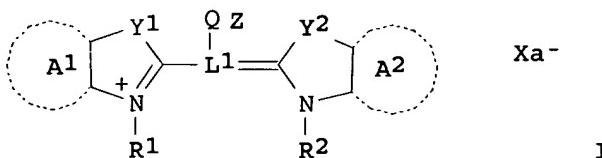


IC ICM G03F007-004
 ICS G03F007-004; B41N001-14; G03F007-00; G03F007-029
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST near IR laser exposure photopolymerizable compn
 lithog; lithog printing plate storage stability
 benzylamine; phthalocyanine sensitizer radical
 generator photopolymn sensitivity
 IT Lithographic plates
 Photoimaging materials
 (amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT Amines, uses
 (amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT Polymerization catalysts
 (photopolymn.; amine-containing photopolymerizable compns
 . for lithog. plates with good near IR laser
 sensitivity and storage stability)
 IT Cyanine dyes
 (sensitizing dye; amine-containing photopolymerizable
 compns. for lithog. plates with good near IR
 laser sensitivity and storage stability)
 IT 259133-57-8
 (amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT 121-44-8, Triethylamine, uses 620-40-6, Tribenzylamine
 (amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT 168112-77-4, Methacrylic acid-methyl methacrylate copolymer ester
 with (3,4-epoxycyclohexyl)methyl methacrylate 220171-03-9,
 Acrylonitrile-2-hydroxy-3-allyloxypropyl methacrylate-methacrylic
 acid-vinyl methacrylate copolymer
 (binder; amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT 4986-89-4 32435-46-4 77001-81-1
 (monomer; amine-containing photopolymerizable compns. for
 lithog. plates with good near IR laser sensitivity and
 storage stability)
 IT 290-87-9D, s-Triazine, derivs. 3584-23-4, 2-(4-Methoxyphenyl)-
 4,6-bis(trichloromethyl)-s-triazine 191726-43-9
 (radical generator; amine-containing
 photopolymerizable compns. for lithog.
 plates with good near IR laser sensitivity and storage
 stability)
 IT 328063-81-6
 (sensitizing dye; amine-containing photopolymerizable
 compns. for lithog. plates with good near IR
 laser sensitivity and storage stability)
 IT 574-93-6, Phthalocyanine
 (sensitizing dye; amine-containing photopolymerizable
 compns. for lithog. plates with good near IR
 laser sensitivity and storage stability)

L36 ANSWER 21 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:503933 HCAPLUS
 DOCUMENT NUMBER: 137:85964
 TITLE: Photopolymerizable compositions
 containing cyanine compounds as sensitizers
 and lithographic plates using them
 INVENTOR(S): Urano, Toshiyoshi
 PATENT ASSIGNEE(S): Mitsubishi Chemical Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002189291	A2	20020705	JP 2000-390192	
				2000
				1222
PRIORITY APPLN. INFO.:			JP 2000-390192	
				2000
				1222

OTHER SOURCE(S): MARPAT 137:85964
 GI

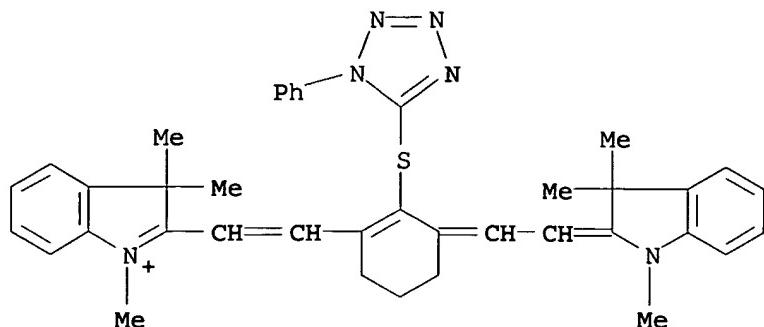


AB The compns. contain (A) ethylenically-unsatd. compds.,
 (B) sensitizers I [Y1, Y2 = S, O, dialkylmethylene; A1, A2 =
 (un)substituted benzene ring, (un)substituted naphthalene ring;
 R1, R2 = (un)substituted alkyl, (un)substituted aryl,
 (un)substituted aralkyl; L1 = (un)substituted heptamethine; Q = O,
 S; Z = (un)substituted tetrazolyl; Xa- = counter anion], and (c)
 photoinitiators. The lithog. plate comprises a
 support and a layer of the compns. The compns
 . are sensitive to visible light especially near-IR and are not
 sensitive to UV light, so the lithog. plate can be
 handled under a white fluorescent lamp.

IT 440102-72-7
 (photopolymerizable compns. containing cyanine compds.
 having tetrazolyl group as sensitizers for near-IR-sensitive
 lithog. plates)

RN 440102-72-7 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[(1-phenyl-1H-tetrazol-5-yl)thio]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, chloride (9CI) (CA INDEX NAME)

● Cl⁻

- IC ICM G03F007-004
ICS B41N001-14; C08F002-50; G03F007-00; G03F007-028; G03F007-029
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
- ST photopolymerizable compn cyanine sensitizer
presensitized lithog plate; tetrazolyl cyanine compd
sensitizer presensitized lithog plate; near IR sensitive
lithog plate cyanine dye sensitizer
- IT Cyanine dyes
(photopolymerizable compns. containing cyanine compds.
having tetrazolyl group as sensitizers for near-IR-sensitive
lithog. plates)
- IT Polymerization catalysts
(photopolymn.; photopolymerizable compns. containing
cyanine compds. having tetrazolyl group as sensitizers for
near-IR-sensitive lithog. plates)
- IT Lithographic plates
(presensitized; photopolymerizable compns. containing
cyanine compds. having tetrazolyl group as sensitizers for
near-IR-sensitive lithog. plates)
- IT 26936-24-3, Methacrylic acid-methyl acrylate-methyl methacrylate copolymer
(binder; photopolymerizable compns. containing cyanine
compds. having tetrazolyl group as sensitizers for
near-IR-sensitive lithog. plates)
- IT 3584-23-4, 2-(p-Methoxyphenyl)-4,6-bis(trichloromethyl)-s-triazine
120307-06-4, Tetrabutylammonium butyltriphenylborate 220651-99-0
(photoinitiator; photopolymerizable compns.
containing cyanine compds. having tetrazolyl group as sensitizers
for near-IR-sensitive lithog. plates)
- IT 440102-72-7
(photopolymerizable compns. containing cyanine compds.
having tetrazolyl group as sensitizers for near-IR-sensitive
lithog. plates)
- IT 36446-02-3P, Trimethylolpropane triacrylate homopolymer
(photopolymerizable compns. containing cyanine compds.
having tetrazolyl group as sensitizers for near-IR-sensitive
lithog. plates)

ACCESSION NUMBER: 2002:228647 HCAPLUS
 DOCUMENT NUMBER: 136:270655
 TITLE: Light- and heat-sensitive printing papers free from blistering by heat
 INVENTOR(S): Nagata, Kozo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002086913	A2	20020326	JP 2000-274547	2000 0911
PRIORITY APPLN. INFO.:			JP 2000-274547	2000 0911

AB The printing paper involves a paper support coated at least on 1 side with a resin layer which is formed by curing an unsatd. organic compds. by electron beam irradiation. The light- and heat-sensitive layer of the paper contains (i) heat-responsive microcapsules of coloring components A, substantially colorless compds. B which have polymerizable groups and sites which reacts with A and become colored, and photopolymn. initiators or (ii) A, substantially colorless compds. C which react with A and become colored, substantially colorless compds. D which have polymerizable groups and sites suppressing the reaction between A and C, and photopolymn. initiators.

IT 296781-51-6
 (photosensitizer, photopolymn. initiator; light- and heat-sensitive, cured resin-coated printing papers free from blistering by heat)

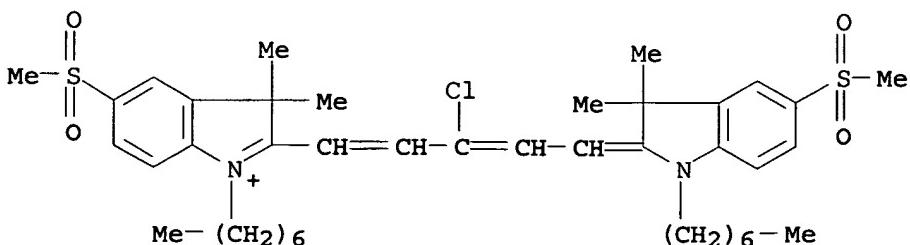
RN 296781-51-6 HCAPLUS

CN 3H-Indolium, 2-[3-chloro-5-[1-heptyl-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-1-heptyl-3,3-dimethyl-5-(methylsulfonyl)-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

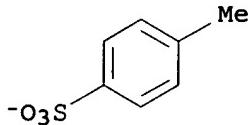
CM 1

CRN 284019-21-2

CMF C41 H58 Cl N2 O4 S2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

IC ICM B41M005-26
 ICS B41M005-30; B41M005-28; G03F007-004; G03F007-027; G03F007-11
 CC 74-7 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
 IT 284019-17-6 296781-51-6 352280-17-2
 (photosensitizer, photopolymer. initiator; light- and
 heat-sensitive, cured resin-coated printing papers free
 from blistering by heat)

L36 ANSWER 23 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2002:101172 HCAPLUS
 DOCUMENT NUMBER: 136:158877
 TITLE: Heat-mode negative-working image-recording
 material and methods of forming image
 INVENTOR(S): Nakamura, Ippei; Sorori, Tadahiro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2002040638	A2	20020206	JP 2000-224031	2000 0725
US 2002045128	A1	20020418	US 2001-899123	2001 0706
US 6770422	B2	20040803		
CN 1334490	A	20020206	CN 2001-120322	2001 0724
EP 1176007	A2	20020130	EP 2001-117666	2001 0725
EP 1176007	A3	20040317		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRIORITY APPLN. INFO.:			JP 2000-224031	A 2000 0725

AB The invention relates to a heat-mode neg.-working image-recording material which can be directly recorded using an IR laser in a manufacture of a lithog. printing plate. The heat-mode neg.-working image-recording material such as a lithog. printing plate comprises (1) an IR absorber having an oxidation potential 0.45V (vs. SCE), (2) a thermal radical generator such as an onium salt, and (3) a radically polymerizable compound. The process involving the development of above recording material by an alkaline solution having $10.5 \leq pH \leq 12.5$ is also claimed.

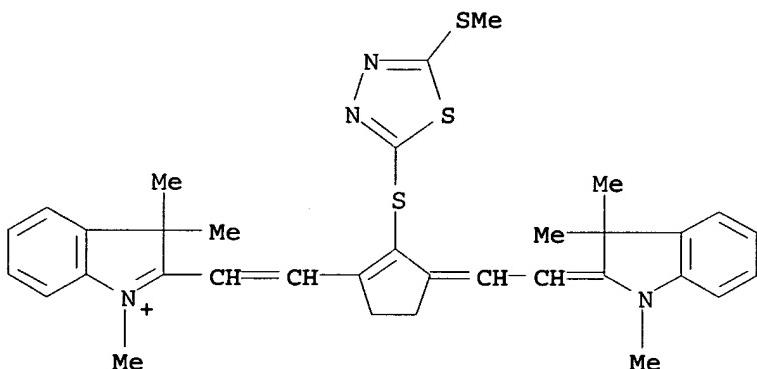
IT 328063-88-3
 (radical generator; heat-mode neg.-working image-recording material from)

RN 328063-88-3 HCAPLUS

CN 3H-Indolium, 2-[2-[3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-2-[[5-(methylthio)-1,3,4-thiadiazol-2-yl]thio]-1-cyclopenten-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI)
 (CA INDEX NAME)

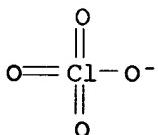
CM 1

CRN 328063-87-2
 CMF C34 H37 N4 S3



CM 2

CRN 14797-73-0
 CMF Cl O4



IC ICM G03F007-004
 ICS B41N001-14; G03F007-00; G03F007-027; G03F007-029; G03F007-32
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST IR absorber onium salt radical generator; lithog

IT printing plate development; image recording material
Lithographic plates
 (computer-to-plate; IR absorber and thermal radical generator
 contained in heat-mode neg.-working image-recording material)
 IT 25183-63-5 66003-78-9 226718-64-5 287925-54-6
328063-88-3
 (radical generator; heat-mode neg.-working
 image-recording material from)

L36 ANSWER 24 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:63917 HCAPLUS

DOCUMENT NUMBER: 136:126607

TITLE: Negative-working heat-mode image recording
 material for lithographic printing
 plate

INVENTOR(S): Nakamura, Ippei

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2002023360	A2	20020123	JP 2000-211147	
				2000
				0712
PRIORITY APPLN. INFO.:			JP 2000-211147	
				2000
				0712

AB The neg.-working image recording material comprises (A) an IR absorber having the maximum absorption wavelength 900-1,200 nm, (B) a radical generator such as an onium salt, and (C) a compound subjected to radical polymerization. This recording material is used for a computer-to-plate lithog. printing plate.

IT 155613-98-2
 (IR absorber; IR absorber and radical generator for neg.-working heat-mode image recording material used for lithog. printing plate)

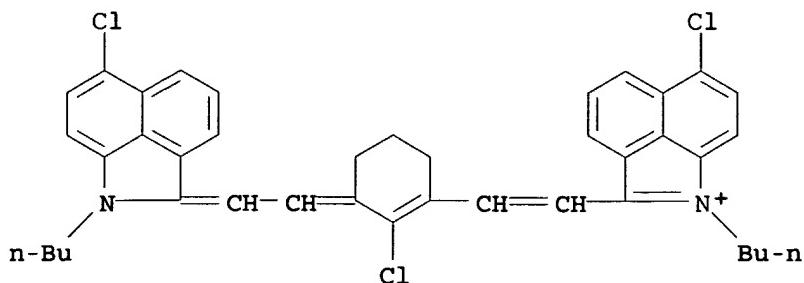
RN 155613-98-2 HCAPLUS

CN Benz[cd]indolium, 1-butyl-2-[2-[3-[(1-butyl-6-chlorobenz[cd]indol-2(1H)-ylidene)ethylidene]-2-chloro-1-cyclohexen-1-yl]ethenyl]-6-chloro-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 155613-97-1

CMF C40 H38 Cl3 N2

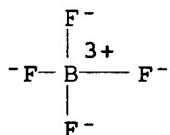


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



IC ICM G03F007-029
ICS C08F002-46; C08F020-10; C08F020-56; C08F022-16; G03F007-004;
G03F007-027

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST heat mode image recording material lithog printing plate

IT Lithographic plates

(IR absorber and radical generator for neg.-working heat-mode
image recording material used for lithog. printing
plate)

IT Onium compounds

(radical generator; IR absorber and radical generator for
neg.-working heat-mode image recording material used for
lithog. printing plate)

IT 65767-27-3 155613-98-2 155614-01-0

(IR absorber; IR absorber and radical
generator for neg.-working heat-mode image recording
material used for lithog. printing plate)

IT 61358-25-6 262612-33-9 287925-54-6 390357-26-3

(radical generator; IR absorber and radical generator for
neg.-working heat-mode image recording material used for
lithog. printing plate)

L36 ANSWER 25 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:760373 HCPLUS

DOCUMENT NUMBER: 135:325271

TITLE: Photopolymerizable compositions
containing urethane compounds, presensitized
lithographic printing plates
therefrom, and platemaking method

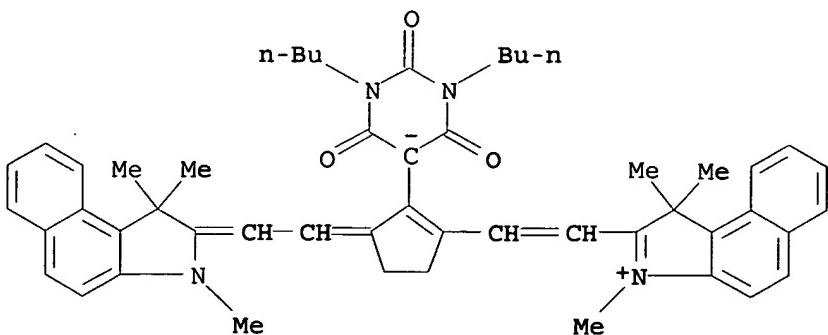
INVENTOR(S): Okamoto, Hideaki; Urano, Toshiyoshi; Noguchi,

PATENT ASSIGNEE(S): Motoharu
 Mitsubishi Chemical Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.
 CODEN: JKXXAF

DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001290267	A2	20011019	JP 2001-16536	2001 0125
PRIORITY APPLN. INFO.:			JP 2000-23993	A 2000 0201

- AB The compns. contain ethylenic monomers (including urethane compds. having ≥ 4 urethane bonds and ≥ 4 addition-polymerizable double bonds) and photopolymn. initiator systems. Thus, a composition containing a reaction product of NK Ester A 9530 (dipentaerythritol pentaacrylate-based compound) and ME 20-100 (polyisocyanate) 44, 2-(methacryloyloxy)ethyl phosphate 11, a titanocene radical generator 5, dipyrrometheneboron difluoride-based sensitizers 1.0, and Me methacrylate-methacrylic acid-Cyclomer A 200 (alicyclic epoxy acrylate) copolymer 45 parts was applied on an anodized Al plate, exposed to a laser beam, and developed with an alkali solution to give a test piece with good resolution and durability.
- IT 367965-49-9
 (sensitizer; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- RN 367965-49-9 HCPLUS
- CN 1H-Benz[e]indolium, 2-[2-[2-(1,3-dibutylhexahydro-2,4,6-trioxo-5-pyrimidinyl)-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclopenten-1-yl]ethenyl]-1,1,3-trimethyl-, inner salt (9CI) (CA INDEX NAME)



- IC ICM G03F007-027
 ICS C08F002-50; C08F299-06; G03F007-00; G03F007-004; G03F007-029;
 G03F007-031; G03F007-032
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and

- Other Reprographic Processes)
- ST photopolymer ethylenic polyurethane presensitized lithog plate; titanocene initiator cyanine dye sensitizer platemaking; pentaerythritol acrylate polymer laser exposure resoln
- IT Polyurethanes, preparation
(acrylates; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT Catalysts
(photochem.; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT Photoimaging materials
(photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT Polymerization catalysts
(photopolymer.; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT Lithographic plates
(presensitized; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT Cyanine dyes
(sensitizer; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 132011-04-2P, Cyclomer A 200-methacrylic acid-methyl methacrylate copolymer
(binder; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 620-40-6, Tribenzylamine
(photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 24599-21-1, Mono[2-(methacryloyloxy)ethyl] phosphate 32435-46-4, Bis[2-(methacryloyloxy)ethyl] phosphate 56361-55-8, Bisphenol A diethylene glycol diacrylate 302778-63-8 367966-32-3
(photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 617-73-2DP, 2-Hydroxyoctanoic acid, reaction products with polyurethane 367966-29-8DP, reaction products with hydroxyoctanoic acid 367966-29-8P, ME 20-100-NK Ester A 9530 copolymer 367966-30-1P, ME 20-100-NK Ester 701A copolymer
(photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 3584-23-4 367965-47-7 367965-48-8
(photopolymn. initiator; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)
- IT 55799-81-0 141052-73-5 259133-57-8 367965-49-9
(sensitizer; photopolymerizable compns. containing urethane compds. for photosensitive lithog. plates with good resolution and durability)

ACCESSION NUMBER: 2001:472141 HCAPLUS
 DOCUMENT NUMBER: 135:68543
 TITLE: Method for formation of negative images by imagewise irradiation of infrared laser
 INVENTOR(S): Aoshima, Keitaro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001175006	A2	20010629	JP 1999-362335	1999 1221
PRIORITY APPLN. INFO.: JP 1999-362335				1999 1221

AB Neg. image-forming material consisting of a support having a photosensitive layer containing (A) IR absorber, (B) radical generator, (C) radically polymerizable compound, and (D) binder polymer irradiated by imagewise exposure with IR laser, 1-20 s heat treatment at 60-120°, and aqueous alkaline development to give neg. images. The materials are suitable for digital direct printing plates.

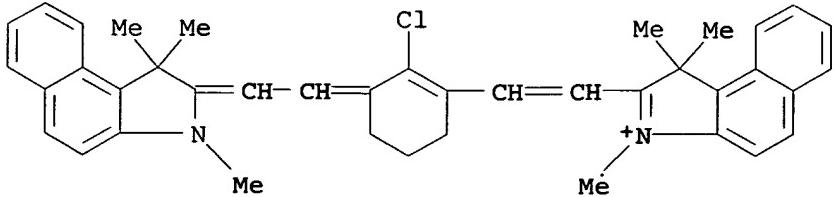
IT 134127-48-3
 (IR absorbing agent; formation of neg. images suitable as digital direct printing plates by imagewise IR irradiation)

RN 134127-48-3 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,1,3-trimethyl-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

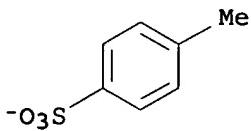
CM 1

CRN 134127-47-2
 CMF C40 H40 Cl N2



CM 2

CRN 16722-51-3
 CMF C7 H7 O3 S



IC ICM G03F007-38
 ICS G03F007-30
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35, 38
 ST digital direct printing plate photoimaging compn; IR absorber photopolymn compn imagewise irradn; neg image photopolymn compn IR laser
 IT IR laser radiation
Lithographic plates
 (formation of neg. images suitable as digital direct printing plates by imagewise IR irradiation)
 IT Onium compounds
 (radical generator; formation of neg. images suitable as digital direct printing plates by imagewise IR irradiation)
 IT 134127-48-3
 (IR absorbing agent; formation of neg. images suitable as digital direct printing plates by imagewise IR irradiation)
 IT 262612-33-9
 (radical generator; formation of neg. images suitable as digital direct printing plates by imagewise IR irradiation)

L36 ANSWER 27 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:229968 HCAPLUS
 DOCUMENT NUMBER: 135:46490
 TITLE: Preparation of a novel infrared photoinitiator and kinetic monitoring of photopolymerization by real time FT-IR spectroscopy
 AUTHOR(S): Li, Bin; Zhang, Shihai; Tang, Liming; Zhou, Qixiang
 CORPORATE SOURCE: Department of Chemical Engineering, Materials Research Center, Tsinghua University, Beijing, 100084, Peop. Rep. China
 SOURCE: Polymer Journal (Tokyo, Japan) (2001), 33(3), 263-269
 CODEN: POLJB8; ISSN: 0032-3896
 PUBLISHER: Society of Polymer Science, Japan
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB In this paper, a novel cationic cyanine dye-borate complex, 1,3,3,1',3',3'-hexamethyl-11-chloro-10,12-propylenetricarbocyanine butyltriphenylborate, was prepared and used as the photoinitiator in IR laser-induced photopolymn. of acrylates. It has a maximum electron absorption at 786 nm, which matched well with the output wavelength of the adopted IR laser diode, with a maximum molar extinction coefficient of 1.4 + 105 L mol⁻¹ cm⁻¹ in chloroform solution. The IR laser irradiation polymerization of bis[2-(acryloyloxy)ethyl] phthalate in the presence of an acrylic binder, photoinitiator, and solvent was monitored through real-time FT-IR spectroscopy. The double bond conversion was

determined from the decrease in the absorption of acrylate monomer at 1635 cm⁻¹ and 1620 cm⁻¹ (CH₂=CH stretching) in FT-IR spectra during laser irradiation. As the concentration of photoinitiator rose, the polymerization rate (Rp) increased rapidly but then decreased when the concentration reached a critical value. Rp and the ultimate double bond conversion increased as the IR laser power was enhanced, whereas they fell greatly as the thickness of the sample layer increased.

IT 299172-64-8P
 (IR cyanine dye photoinitiator for polymerization
 of bis(acryloxyloxyethyl) phthalate)

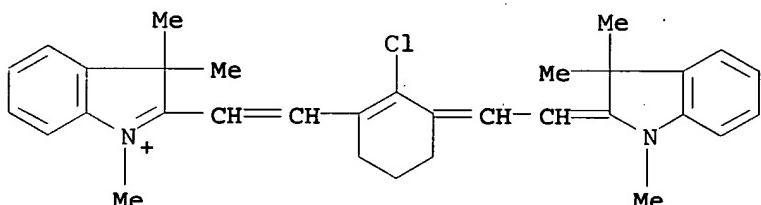
RN 299172-64-8 HCAPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 69415-17-4

CMF C32 H36 Cl N2

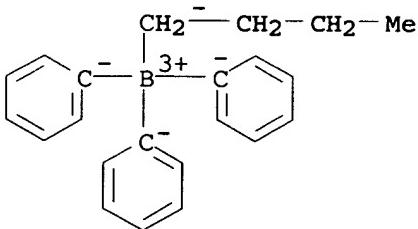


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS

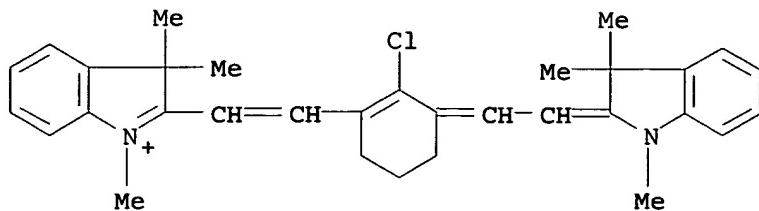


IT 56289-67-9

(starting material; preparation of IR cyanine dye
 photoinitiator for polymerization of
 bis(acryloxyloxyethyl) phthalate)

RN 56289-67-9 HCAPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, iodide (9CI) (CA INDEX NAME)



● I -

- CC 35-3 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 37, 41
- ST cyanine dye prep catalyst photopolymn acrylate; IR laser
 polymn acrylate cyanine dye catalyst; kinetics
 polymn acrylate FTIR spectroscopy
- IT IR lasers
 (in polymerization of bis(acryloxyloxyethyl) phthalate)
- IT Polymerization kinetics
 (photopolymn.; of bis(acryloxyloxyethyl) phthalate in presence
 of IR cyanine dye)
- IT Polymerization catalysts
 (photopolymn.; preparation of IR cyanine dye photoinitiator for
 polymerization of bis(acryloxyloxyethyl) phthalate)
- IT 299172-64-8P
 (IR cyanine dye photoinitiator for polymerization
 of bis(acryloxyloxyethyl) phthalate)
- IT 27306-39-4, Acrylic acid-butyl acrylate-methyl
 methacrylate-styrene copolymer
 (binder in IR cyanine dye-catalyzed polymerization of
 bis(acryloxyloxyethyl) phthalate)
- IT 117522-01-7P, Tetramethylammonium butyltriphenylborate
 (intermediate; preparation of IR cyanine dye photoinitiator for
 polymerization of bis(acryloxyloxyethyl) phthalate)
- IT 75-57-0, Tetramethylammonium chloride 960-71-4, Triphenylborane
 56289-67-9
 (starting material; preparation of IR cyanine dye
 photoinitiator for polymerization of
 bis(acryloxyloxyethyl) phthalate)
- REFERENCE COUNT: 30 THERE ARE 30 CITED REFERENCES AVAILABLE
 FOR THIS RECORD. ALL CITATIONS AVAILABLE
 IN THE RE FORMAT

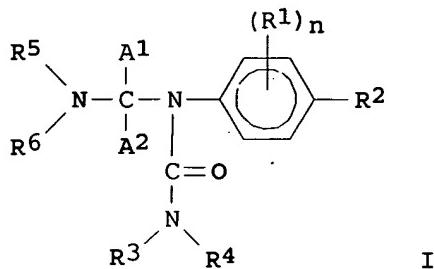
L36 ANSWER 28 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2001:46098 HCPLUS
 DOCUMENT NUMBER: 134:123563
 TITLE: Photopolymerizable imaging materials
 containing microcapsules of dye precursors
 INVENTOR(S): Ishikawa, Shunichi; Morita, Kensuke; Nakamura,
 Takeki
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001013680	A2	20010119	JP 1999-180307	1999 0625

PRIORITY APPLN. INFO.: JP 1999-180307
1999
0625

OTHER SOURCE(S): MARPAT 134:123563
GI



AB The material has a photosensitive layer containing (a) microcapsules of azomethine dye precursors I ($A_1, A_2 = NR_5R_6$ or atomic group required to form a coupler residue along with the C atom to which A_1 and A_2 link; $R_1 =$ substituent; $n = 0-4$; $R_2 = OH, NR_7R_8$; $R_7, R_8 = H,$ substituent; $R_3, R_4 = H, alkyl;$ $R_5, R_6 =$ substituent; NR_5R_6 may be N-containing ring), (b) oil droplets containing photoinitiators and polymerizable electrophiles, and (c) binders. The photoinitiators may be complexes of cationic dyes with anionic B compds. The material is imagewise exposed to induce polymerization of the electrophiles and heated to react unreacted electrophiles with the dye precursor to develop color images.

IT 296781-51-6 (photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)

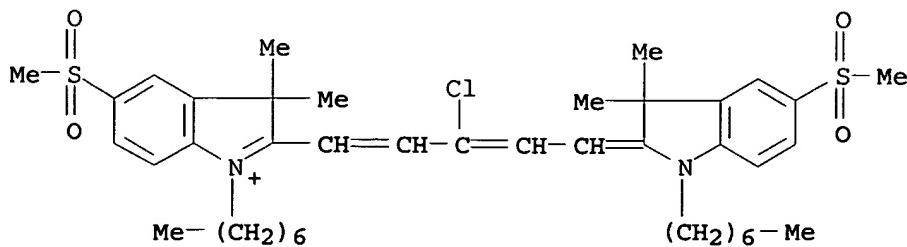
RN 296781-51-6 HCPLUS

CN 3H-Indolium, 2-[3-chloro-5-[1-heptyl-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-1-heptyl-3,3-dimethyl-5-(methylsulfonyl)-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

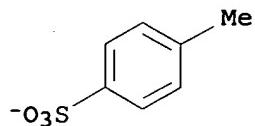
CM 1

CRN 284019-21-2

CMF C41 H58 Cl N2 O4 S2



CM 2

CRN 16722-51-3
CMF C7 H7 O3 S

- IC ICM G03F007-004
ICS G03F007-004; G03F007-26
CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
ST photopolymerizable imaging azomethine dye precursor microcapsule polymerizable electrophile
IT Dyes
Electrophiles
Photothermographic copying
(photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)
IT Photoimaging materials
(photopolymerizable; photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)
IT Polymerization catalysts
(photopolymn.; photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)
IT 300822-98-4P 300822-99-5P
(in preparation of azomethine dye precursor; photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)
IT 111-36-4, Butyl isocyanate 288-32-4, Imidazole, reactions
20191-53-1 180200-98-0 300823-00-1
(in preparation of azomethine dye precursor; photopolymerizable imaging materials containing microcapsules of azomethine dye precursors, photoinitiators, polymerizable electrophiles, and binders)
IT 117522-01-7 296781-51-6 303153-82-4
(photopolymerizable imaging materials containing microcapsules of

azomethine dye precursors, photoinitiators,
polymerizable electrophiles, and binders)

IT 300822-96-2 300822-97-3 320599-59-5
(photopolymerizable imaging materials containing microcapsules of
azomethine dye precursors, photoinitiators,
polymerizable electrophiles, and binders)

IT 320599-61-9P
(photopolymerizable imaging materials containing microcapsules of
azomethine dye precursors, photoinitiators,
polymerizable electrophiles, and binders)

IT 154042-70-3
(photopolymerizable imaging materials containing microcapsules of
azomethine dye precursors, photoinitiators,
polymerizable electrophiles, and binders)

L36 ANSWER 29 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:686599 HCAPLUS

DOCUMENT NUMBER: 133:274311

TITLE: Thermal-transfer recording materials and image formation process thereof

INVENTOR(S): Namiki, Tomizo; Nakamura, Hideyuki; Fujimori, Junichi; Totsuka, Mikio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

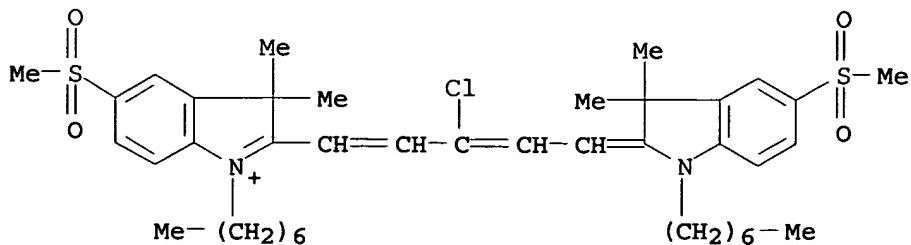
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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-----	-----	-----	-----	-----
JP 2000267272	A2	20000929	JP 1999-67414	1999
				0312
PRIORITY APPLN. INFO.:			JP 1999-67414	1999
				0312

AB The thermal-transfer recording materials involve supports, (A) polymerizable layers containing organic polymer binders, photopolymerizable monomers and/or photopolymerizable oligomers, and photopolymn. initiators, preferably pigment borates, (B) colorant layers containing organic polymer binders and optionally photopolymn. initiators, and (C) adhesive layers containing thermoplastic polymers formed in this order. The recording materials have excellent color reproducibility and are especially suitable for color proofs, DDCP (direct digital color proof), mask images, and multicolor displays.

IT 284019-21-2
(spectral sensitizer, photopolymn. initiator component; thermal-transfer printing materials with unpigmented photopolymerizable layers and photopolymerizable component-free colorant layers)

RN 284019-21-2 HCAPLUS

CN 3H-Indolium, 2-[3-chloro-5-[1-heptyl-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-1-heptyl-3,3-dimethyl-5-(methylsulfonyl)- (9CI) (CA INDEX NAME)



IC ICM G03F007-004

ICS G03F003-10; G03F007-028; G03F007-40

CC 74-7 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 284019-21-2

(spectral sensitizer, photopolymer. initiator
component; thermal-transfer printing materials with
unpigmented photopolymerizable layers and photopolymerizable
component-free colorant layers)

L36 ANSWER 30 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:600538 HCAPLUS

DOCUMENT NUMBER: 133:200879

TITLE: Photopolymerizable composition for
recording materialsINVENTOR(S): Takashima, Masanobu; Noro, Masaki; Fukushige,
Yuichi; Matsumoto, Hirotaka

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000235262	A2	20000829	JP 1999-323838	1999 1115

PRIORITY APPLN. INFO.: JP 1998-356543 A

1998
1215

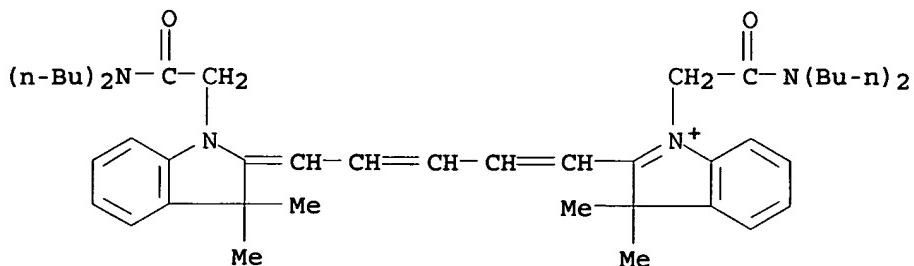
AB The photopolymerizable composition contains a polymerizable compound having ethylenic groups and a dye prepared from a reaction of an electron donating color less dye and an electron accepting compound, and a radical generating compound, which generates a radical by reacting with the dye.
The photopolymerizable composition is sensitive not only UV but also visible to IR light.

IT 289037-12-3 289037-16-7
(photopolymerizable composition)

RN 289037-12-3 HCAPLUS

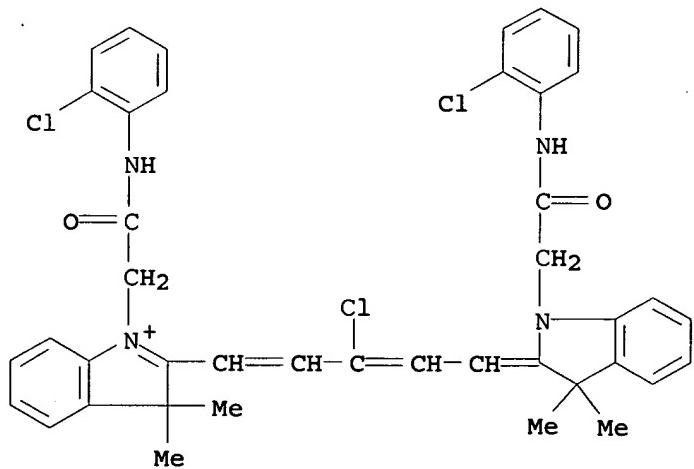
CN 3H-Indolium, 1-[2-(dibutylamino)-2-oxoethyl]-2-[5-[1-[2-(dibutylamino)-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX)

NAME)

● Br⁻

RN 289037-16-7 HCAPLUS

CN 3H-Indolium, 2-[3-chloro-5-[1-[2-[(2-chlorophenyl)amino]-2-oxoethyl]-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene]-1,3-pentadienyl]-1-[2-[(2-chlorophenyl)amino]-2-oxoethyl]-3,3-dimethyl-, bromide (9CI) (CA INDEX NAME)

● Br⁻

IC ICM G03F007-029

ICS C08F002-44; C08F002-48; G03F007-004; G03F007-027; G11B007-24

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 35

ST photopolymerizable compn recording material

IT Printing (nonimpact)

(color; photopolymerizable composition for recording materials such as lithog. plates, photoresists)

IT Light-sensitive materials

(photopolymerizable composition for recording materials)

such as lithog. plates, photoresists)
 IT 4986-89-4, Pentaerythritol tetraacrylate 7473-98-5 21934-64-5
 37337-02-3, Takenate D 110N 37470-51-2, Butyl
 3-chloro-4-hydroxybenzoate 50292-95-0 92601-66-6 93207-03-5
 114090-19-6 136168-28-0 142626-85-5 143129-14-0
 144190-25-0 145550-89-6 191726-45-1 199127-03-2
 225107-27-7 289037-10-1 289037-12-3
289037-16-7 289037-18-9 289037-24-7
 (photopolymerizable composition)

L36 ANSWER 31 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:506196 HCAPLUS

DOCUMENT NUMBER: 133:96781

TITLE: Squaric acid dye/iodonium compound composite photoinitiator for photopolymerizable composition

INVENTOR(S): He, Yong; Li, Miaozenh; Wang, Erjian; Wu, Feipeng

PATENT ASSIGNEE(S): Inst. of Photochemistry, Chinese Academy of Sciences, Peop. Rep. China

SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 13 pp.

CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 1232993	A	19991027	CN 1999-107347	1999 0519
CN 1107884	B	20030507	CN 1999-107347	1999 0519
PRIORITY APPLN. INFO.:				

OTHER SOURCE(S): MARPAT 133:96781

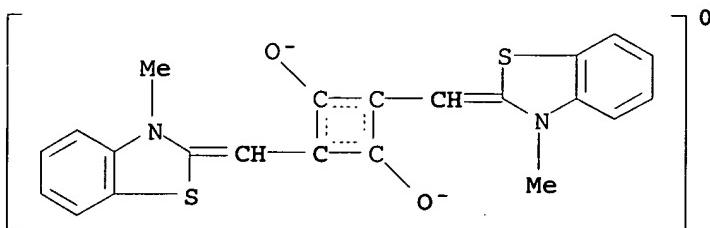
AB A squaric acid dye/iodonium compound composite photoinitiator for a photopolymerizable composition is disclosed. The squaric acid dye is represented by the formula 2,4-di(Ar)cyclobutadiene-1,3-diol inner salt [Ar = 4-[di(R1)amino]phenyl, 4-(R1oxy)phenyl, 2,4,6-trihydroxyphenyl, 2-[di(R1)amino]-5-thienyl, R2-1H-2,3-dihydro-1,1-di(R1)inden-2-ylidenemethyl, R2-2,3-dihydro-3-R3-benzo[d]-1,3-thiazol-2-ylidenemethyl, R1-2,3-dihydro-3-R2-benzo[d]-1,3-selenazol-2-ylidenemethyl, R1-1-R2-1,2,3,4-tetrahydroquinolin-2-ylidenemethyl, 9,10-dihydroacridin-9-ylidenemethyl, or 1'-R1-piperidino[3,4,5-de]-1-naphthyl; R1 = H, alkyl, or aryl; R2 = H, halo, alkyl, alkoxy, alkylamino, or aryl; and R3 = H or alkyl] and synthesized by a condensation reaction of 1 mol of squaric acid with 2 mol of a nucleophilic aromatic compound in butanol/benzene or toluene by reflux for 5-20 h. The iodonium compound is represented by the formula di(Ar')I+X- (Ar' = Ph or 4-R4-phenyl; R4 = H, OH, Cl, or alkyl; and X = Cl, BF4-, AsF6-, PF6-, ClO4-, SbF6-, or TsO-). A polymeric material is obtained by near IR-visible light photopolymerization of a composition comprising olefin monomers 29.9-70, the squaric acid dye/iodonium compound composite photoinitiator

0.001-0.1, and an organic solvent 29.9-70%. A photocured coating is obtained by near IR-visible light photopolymn. of a composition comprising a photoreactive resin 40-75, a multifunctional acrylate crosslinking agent 10-30, a monofunctional acrylate reactive diluent 5-15, the squaric acid dye/iodonium compound composite photoinitiator 1-11, and an organic solvent 5-10%. The olefin monomers are selected from acrylates, acrylamide, acrylonitrile, styrene, vinyl acetate, and vinylpyrrolidone; the photoreactive resin is selected from epoxidized acrylates, polyester acrylates, polyurethane acrylates, and unsatd. polyesters; the crosslinking agent is selected from trihydroxymethylolpropane triacrylate, ethoxylated or propoxylated trihydroxymethylolpropane triacrylate, pentaerythritol triacrylate, bis(pentaerythritol) hexaacrylate, alkylene bis(acrylates), and glycol bis(acrylate); and the reactive diluent is selected from ether-type monofunctional acrylates, alkyl-type monofunctional acrylates, hydroxyalkyl acrylates, and hydroxyalkylmethyl acrylates.

IT 123036-97-5P 201557-75-7P
 (synthesis and use in photoinitiator compns. for photopolymerizable compns.)

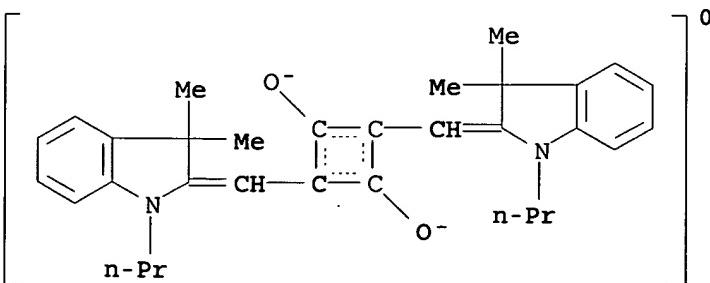
RN 123036-97-5 HCPLUS

CN Cyclobutenediylium, 1,3-dihydroxy-2,4-bis[(3-methyl-2(3H)-benzothiazolylidene)methyl]-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 201557-75-7 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(1,3-dihydro-3,3-dimethyl-1-propyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



IC ICM G03F007-029

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Polymerization

(photopolymn.; of acrylic compds. using squaric acid

IT 43134-09-4P 123036-97-5P 201557-75-7P
 dye/iodonium compound composite photoinitiators)
 (synthesis and use in photoinitiator compns. for
 photopolymerizable compns.)

L36 ANSWER 32 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1999:566275 HCPLUS
 DOCUMENT NUMBER: 131:191861
 TITLE: Imaging system employing encapsulated
 radiation-sensitive composition
 INVENTOR(S): Polycarpov, Alex; Camillus, Joseph C.
 PATENT ASSIGNEE(S): Cycolor, Inc., USA
 SOURCE: PCT Int. Appl., 20 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9944099	A1	19990902	WO 1999-US4131	1999 0225
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2319603	AA	19990902	CA 1999-2319603	1999 0225
AU 9927902	A1	19990915	AU 1999-27902	1999 0225
BR 9907640	A	20001114	BR 1999-7640	1999 0225
EP 1058864	A1	20001213	EP 1999-908475	1999 0225
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
US 6174642	B1	20010116	US 1999-257624	1999 0225
JP 2002505447	T2	20020219	JP 2000-533790	1999 0225
PRIORITY APPLN. INFO.:			US 1998-75892P	P 1998 0225
			WO 1999-US4131	W 1999

0225

OTHER SOURCE(S) : MARPAT 131:191861

AB A photosensitive imaging is disclosed comprising a support having a layer of microcapsules on 1 surface thereof, the microcapsules having an image-forming agent associated therewith and containing an internal phase including a photohardenable composition, the composition comprising a free-radical addition polymerizable or crosslinkable compound and complex of an IR-sensitive cationic dye and a borate anion being capable of absorbing IR radiation and producing free radicals which initiate free-radical polymerization or crosslinking of the polymerizable or crosslinkable compound

IT 137781-62-5 141714-60-5 141714-62-7
 141714-63-8 142300-12-7 142632-63-1
 153296-41-4 240406-03-5 240406-04-6
 (imaging system using encapsulated radiation-sensitive composition containing IR-sensitive cyanine dye photoinitiator)

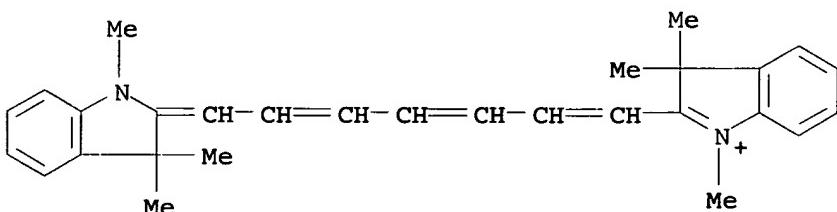
RN 137781-62-5 HCPLUS

CN 3H-Indolium, 2-[7-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

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CRN 47676-39-1

CMF C29 H33 N2

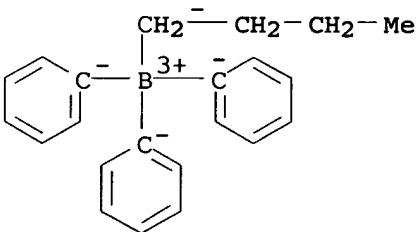


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



RN 141714-60-5 HCPLUS

CN Quinolinium, 1-ethyl-2-[7-(1-ethyl-2(1H)-quinolinylidene)-1,3,5-

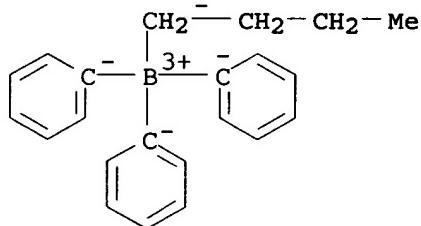
heptatrienyl] -, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47252-39-1

CMF C22 H24 B

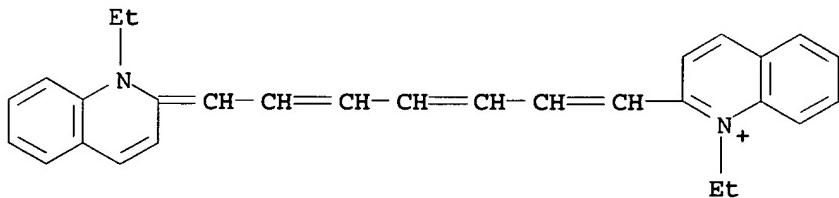
CCI CCS



CM 2

CRN 37069-61-7

CMF C29 H29 N2



RN 141714-62-7 HCAPLUS

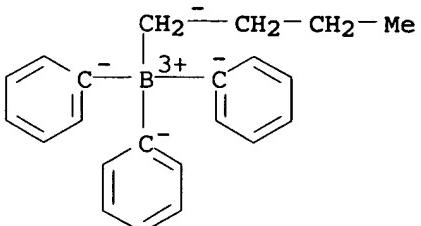
CN Benzothiazolium, 3-ethyl-2-[7-(3-ethyl-2(3H)-benzothiazolylidene)-1,3,5-heptatrienyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47252-39-1

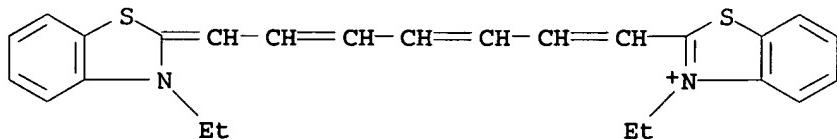
CMF C22 H24 B

CCI CCS



CM 2

CRN 23178-68-9
 CMF C25 H25 N2 S2

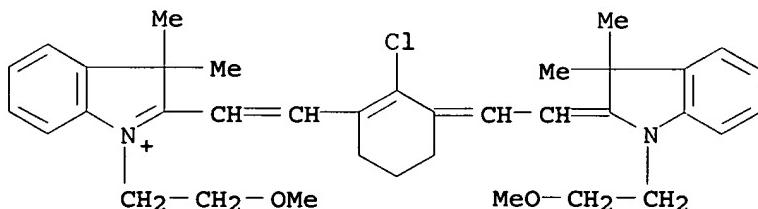


RN 141714-63-8 HCAPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1-(2-methoxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-(2-methoxyethyl)-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

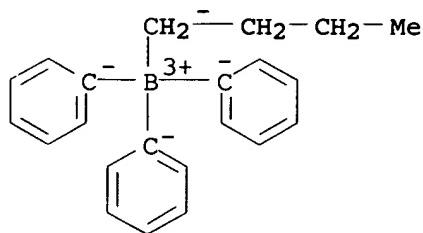
CM 1

CRN 102185-06-8
 CMF C36 H44 Cl N2 O2



CM 2

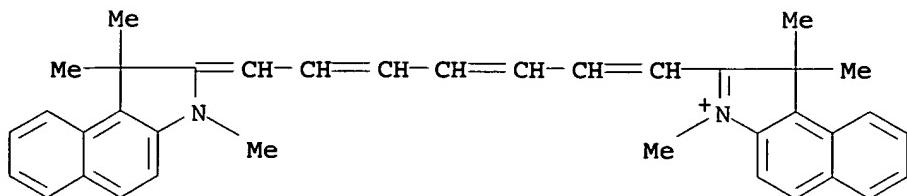
CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



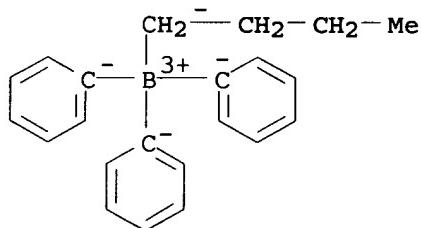
RN 142300-12-7 HCAPLUS

CN 1H-Benz[e]indolium, 2-[7-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3,5-heptatrienyl]-1,1,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47809-39-2
CMF C37 H37 N2

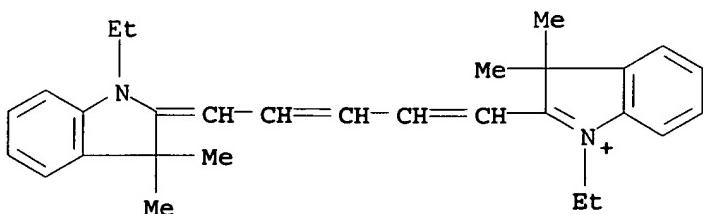
CM 2

CRN 47252-39-1
CMF C22 H24 B
CCI CCS

RN 142632-63-1 HCAPLUS

CN 3H-Indolium, 1-ethyl-2-[5-(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-,
(T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

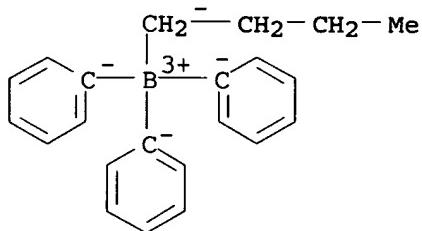
CM 1

CRN 52754-39-9
CMF C29 H35 N2

CM 2

CRN 47252-39-1
CMF C22 H24 B

CCI CCS



RN 153296-41-4 HCAPLUS

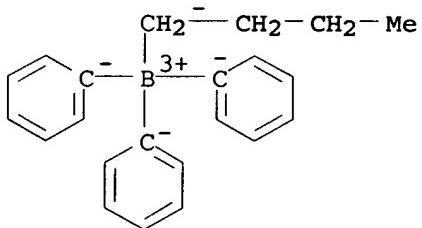
CN Benzoxazolium, 3-ethyl-2-[5-(3-ethyl-2-(3H)-benzoxazolylidene)-1,3-pentadienyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47252-39-1

CMF C22 H24 B

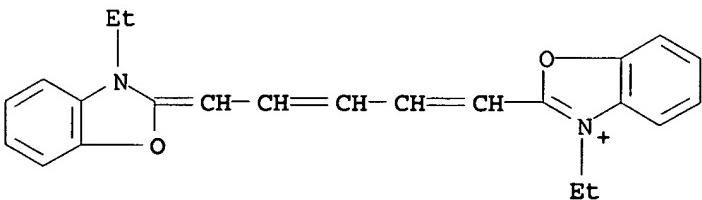
CCI CCS



CM 2

CRN 37069-76-4

CMF C23 H23 N2 O2

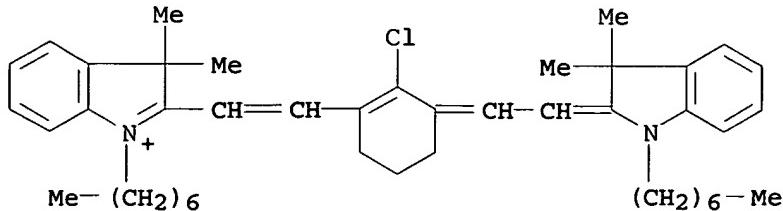


RN 240406-03-5 HCAPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-heptyl-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

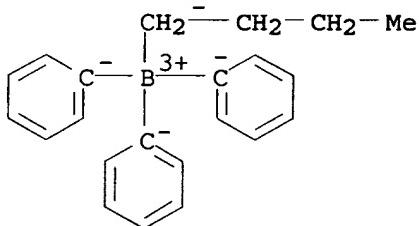
CM 1

CRN 240406-02-4
 CMF C44 H60 Cl N2



CM 2

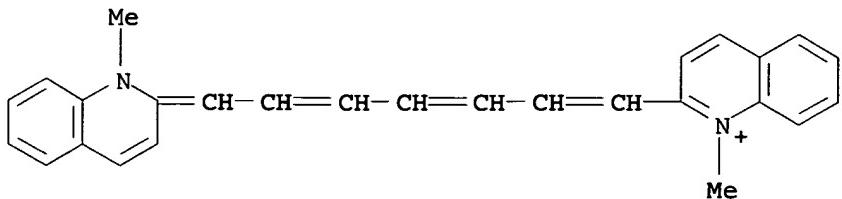
CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



RN 240406-04-6 HCAPLUS
 CN Quinolinium, 1-methyl-2-[7-(1-methyl-2(1H)-quinolinylidene)-1,3,5-heptatrienyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

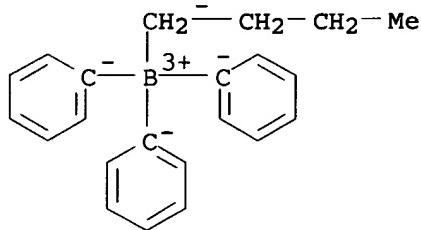
CM 1

CRN 123949-69-9
 CMF C27 H25 N2



CM 2

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



IC ICM G03F007-029
ICS G03F007-00

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST imaging encapsulated radiation microcapsule electron donor; free radical polymer triphenyl butyl borane; cyanine dye free radical polymer imaging

IT Polymerization
(radical; imaging system using encapsulated radiation-sensitive composition containing IR-sensitive cyanine dye photoinitiator)

IT 136107-30-7 137781-62-5 141563-94-2 141563-95-3

141714-54-7 141714-60-5 141714-62-7

141714-63-8 142282-45-9 142300-12-7

142632-62-0 142632-63-1 142632-65-3 148630-91-5

148630-94-8 148630-96-0 148630-97-1 148630-99-3

148631-01-0 148631-03-2 148631-04-3 148631-07-6

148657-93-6 148657-94-7 149580-25-6 149580-27-8

149580-28-9 153296-41-4 240406-03-5

240406-04-6 240421-22-1 240421-23-2 240421-24-3

240421-25-4 240421-26-5 240421-27-6 240421-28-7

240421-30-1 240421-32-3 240421-33-4 240421-34-5

240421-35-6 240421-37-8 240421-38-9 240421-39-0

240421-40-3 240421-41-4 240421-42-5 240421-43-6

240421-45-8 240421-47-0 240421-49-2 240421-50-5

240421-51-6

(imaging system using encapsulated radiation-sensitive composition containing IR-sensitive cyanine dye photoinitiator)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 33 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:310115 HCPLUS

DOCUMENT NUMBER: 131:74016

TITLE: Synthesis of an infrared laser sensitive photoinitiator and its application in photopolymerization

AUTHOR(S): Li, Bin; Tang, Liming; Dong, Hanpeng; Liu, Deshan; Zhou, Qixiang

CORPORATE SOURCE: Department of Chemical Engineering, Tsinghua University, Beijing, 100084, Peop. Rep. China

SOURCE: Yingyong Huaxue (1999), 16(2), 113-114

CODEN: YIHUED; ISSN: 1000-0518

PUBLISHER: Yingyong Huaxue Bianji Weiyuanhui

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A novel cationic dye-borate complex has been synthesized and used for IR laser-induced photopolymer. The photoinitiator could initiate the polymerization of trihydroxymethylpropane triacrylate in 23.4% conversion under IR laser irradiation

IT 137781-62-5P
 (synthesis of IR laser sensitive photoinitiator and its application in photopolymer.)

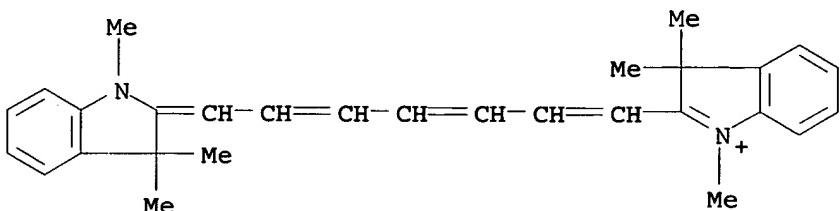
RN 137781-62-5 HCPLUS

CN 3H-Indolium, 2-[7-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47676-39-1

CMF C29 H33 N2

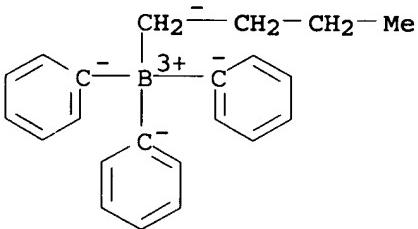


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS

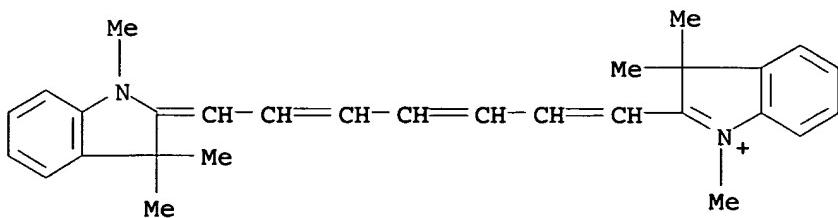


IT 19764-96-6

(synthesis of IR laser sensitive photoinitiator and its application in photopolymer.)

RN 19764-96-6 HCPLUS

CN 3H-Indolium, 2-[7-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, iodide (9CI) (CA INDEX NAME)



● I-

CC 35-3 (Chemistry of Synthetic High Polymers)
 Section cross-reference(s): 74

IT Polymerization catalysts

(photopolymn.; synthesis of IR laser sensitive photoinitiator and its application in photopolymn.)

IT 137781-62-5P

(synthesis of IR laser sensitive photoinitiator and its application in photopolymn.)

IT 75-57-0, Tetramethylammonium chloride 1095-03-0, Triphenyl borate 19764-96-6

(synthesis of IR laser sensitive photoinitiator and its application in photopolymn.)

L36 ANSWER 34 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:111889 HCAPLUS

DOCUMENT NUMBER: 130:189456

TITLE: Laser-writable negative-working thermal/optical imaging material containing lamellar compound

INVENTOR(S): Kunida, Kazuto; Aono, Toshiaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11038633	A2	19990212	JP 1997-196062	1997 0722
PRIORITY APPLN. INFO.:			JP 1997-196062	1997 0722

AB The material, useful for direct plate making from digital signals, comprises (A) a layer comprising an ethylenically-unsatd. monomer, a polymerization initiator generating radicals upon interaction with an IR absorber, and an IR absorber and (B) an overcoat layer containing an inorg. lamellar compound preferably of aspect ratio ≥ 20 . The overcoat layer shields the polymerizable layer from O to accelerate curing

reaction.

IT 23178-67-8, NK 2014

(laser-writable neg.-working thermal/optical imaging sheet with O-shielding coating layer)

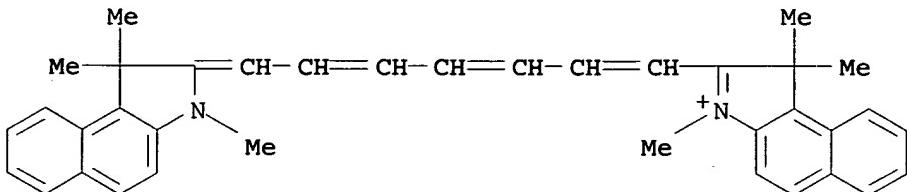
RN 23178-67-8 HCAPLUS

CN 1H-Benz[e]indolium, 2-[7-(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)-1,3,5-heptatrienyl]-1,1,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 47809-39-2

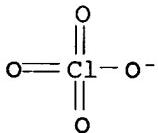
CMF C37 H37 N2



CM 2

CRN 14797-73-0

CMF Cl O4



IC ICM G03F007-11

ICS B41N001-14; G03F007-004

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 38

ST lithog plate acrylic oxygen shielding coating; lamellar compd oxygen shielding lithog compn; mica oxygen shielding coating lithog plate

IT Lithographic plates

(laser-writable neg.-working thermal/optical imaging sheet with O-shielding coating layer)

IT Polymerization catalysts

(radical; laser-writable neg.-working thermal/optical imaging sheet with O-shielding coating layer)

IT 22371-56-8, NK 3508 23178-67-8, NK 2014

(laser-writable neg.-working thermal/optical imaging sheet with O-shielding coating layer)

L36 ANSWER 35 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1999:2398 HCAPLUS

DOCUMENT NUMBER: 130:175182

TITLE: Photoinitiating systems and photopolymer

AUTHOR(S) : materials for holography
 Zhang, Cunlin; Zhao, Jia; He, Jingsuo; Li,
 Lidong; Yang, Yongyuan

CORPORATE SOURCE: Department of Physics, Capital Normal
 University, Beijing, 100037, Peop. Rep. China

SOURCE: Proceedings of SPIE-The International Society
 for Optical Engineering (1998),
 3559(Holographic Displays and Optical Elements
 II), 81-87

PUBLISHER: CODEN: PSISDG; ISSN: 0277-786X
 SPIE-The International Society for Optical
 Engineering

DOCUMENT TYPE: Journal

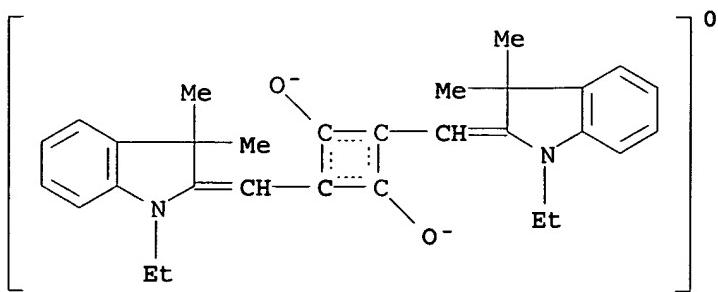
LANGUAGE: English

AB In this paper, the kinetics of photosensitive initiating polymerization and photopolymer holog. recording materials were studied. Four sensitizers that could be sensitive to He-Ne (632.8nm) laser were synthesized and chosen for the study: (1) NK 529 (2) NK 3960 (3) (MCD) (4) ECD. The long-wavelength sensitive photoinitiating system are composed of one of the four compds. above, 2-chlorohexaarrylbimidazole(o-cl-HABI) and 3-mercaptop-4-methyl-4H-1,2,4,-triazole(MTA), which acted as sensitizer, initiator and hydrogen-donor resp. The kinetic study was carried out by using dilatometer, we found the relationships between the rate of polymerization and the concentration of each component. We believe that the photopolymn. was initiated by free radicals which were produced by the electron transfer between the sensitizer and the initiator in the excited state. Comparing the monomer conversion of these four systems, we found: MCD >ECD >NK 529 >NK 3960. We chose the system (MCD-HABI-MTA) as a photoinitiating system of photopolymer holog. materials. The holog. material was composed of the above photoinitiating system, a binder, a mono- or multi-functional monomer, and other additives. Adding the third beam to expose the photopolymer plate simultaneously during the initial holog. exposure can increase the effective exposure sensitivity of the photopolymer plate. Mechanisms of photoinitiating polymerization and hologram formation are discussed. More than 80% of reflection grating diffraction efficiency can be obtained. The holog. gratings have a good phys. and chemical stability under ambient conditions.

IT 88475-75-6, 2,4-Bis[1-ethyl-3,3-diMe-2-indolinylidene)methyl]-cyclobuta dienylum-1,3-diolate
 (ECD, sensitizer; photoinitiating systems and photopolymer materials for holog.)

RN 88475-75-6 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)

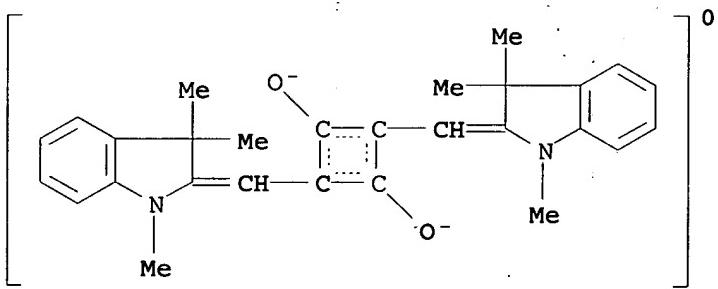


IT 12243-46-8, MCD

(MCD, sensitizer; photoinitiating systems and photopolymer materials for holog.)

RN 12243-46-8 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



IT 220423-10-9, NK 3960

(NK 3960, sensitizer; photoinitiating systems and photopolymer materials for holog.)

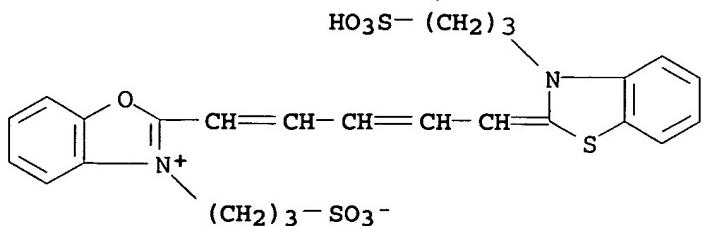
RN 220423-10-9 HCPLUS

CN Benzoxazolium, 3-(3-sulfopropyl)-2-[5-[3-(3-sulfopropyl)-2(3H)-benzothiazolylidene]-1,3-pentadienyl]-, inner salt, compd. with N,N-diethylethanamine (1:1) (9CI) (CA INDEX NAME)

CM 1

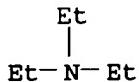
CRN 220423-09-6

CMF C25 H26 N2 O7 S3

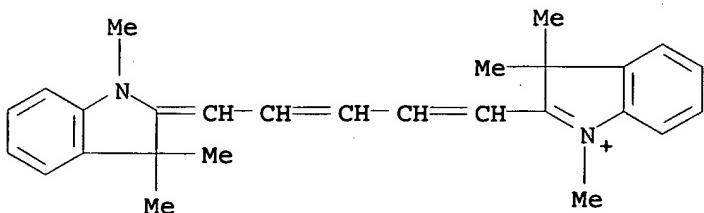


CM 2

CRN 121-44-8
CMF C6 H15 N



- IT 36536-22-8, NK529
(sensitizer; photoinitiating systems and photopolymer materials for holog.)
RN 36536-22-8 HCPLUS
CN 3H-Indolium, 2-[5-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-1,3,3-trimethyl-, iodide (9CI) (CA INDEX NAME)



● I-

- CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35
IT 88475-75-6, 2,4-Bis[1-ethyl-3,3-diMe-2-indolinylidene)methyl]-cyclobuta dienylum-1,3-diolate
(ECD, sensitizer; photoinitiating systems and photopolymer materials for holog.)
IT 12243-46-8, MCD
(MCD, sensitizer; photoinitiating systems and photopolymer materials for holog.)
IT 220423-10-9, NK 3960
(NK 3960, sensitizer; photoinitiating systems and photopolymer materials for holog.)
IT 36536-22-8, NK529
(sensitizer; photoinitiating systems and photopolymer materials for holog.)

REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 36 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:786102 HCPLUS
DOCUMENT NUMBER: 130:88196
TITLE: Recording method of photo- and heat-sensitive recording material
INVENTOR(S): Washizu, Shintaro; Fukushige, Hirokazu; Usami, Tomomasa
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 37 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10324061	A2	19981208	JP 1997-133659	1997 0523
PRIORITY APPLN. INFO.:			JP 1997-133659	1997 0523

OTHER SOURCE(S): MARPAT 130:88196

AB The method is claimed, in which the title material, comprising a support coated with a photo- and heat-sensitive recording layer containing (A) an electron-donating colorless dye microencapsulated in heat-responsive microcapsules, (B) either a compound having electron-accepting portion and polymerizing vinyl monomer portions in its mol. or an electron-accepting color developer and a polymerizing vinyl monomer, and (C) an organic borate salt, is exposed to form an latent image. In the method in which a light source that can expose the material and form a spot of $\leq 600 \mu\text{m}$ in size in 1 direction at the objective position is employed, the material, which is disposed at the objective position, is first irradiated with a beam from the light source in accordance with an image distribution so that a spot of $\leq 600 \mu\text{m}$ in ≥ 1 direction is formed and then irradiated with a beam in accordance with the distribution so that at least part of ≥ 1 spot from the beam overlaps on the spot irradiated first. The material provides high quality black-and-white or color images with high sensitivity and contrast using IR or green to red laser beams by completely dry process.

IT 218618-31-6 218618-32-7 218618-34-9
 (polymerization initiator; photo- and heat
 -sensitive printing material comprising dye-containing
 microcapsule, organic borate, electron-accepting compound, and vinyl
 monomer)

RN 218618-31-6 HCPLUS

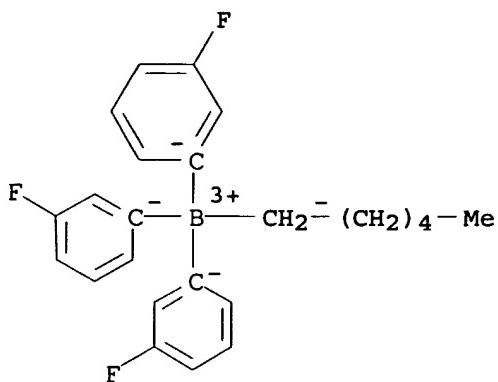
CN 1H-Benz[e]indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,1,3-trimethyl-
 2H-benz[e]indol-2-ylidene)ethyldene]-1-cyclohexen-1-yl]ethenyl]-
 1,1,3-trimethyl-, (T-4)-tris(3-fluorophenyl)hexylborate(1-) (9CI)
 (CA INDEX NAME)

CM 1

CRN 191726-44-0

CMF C24 H25 B F3

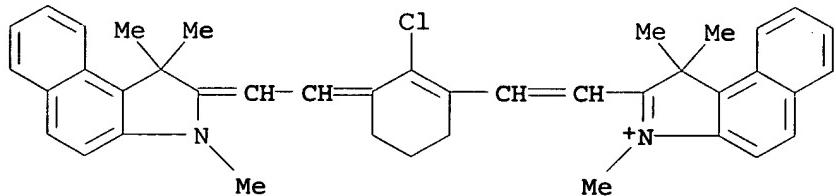
CCI CCS



CM 2

CRN 134127-47-2

CMF C40 H40 Cl N2



RN 218618-32-7 HCAPLUS

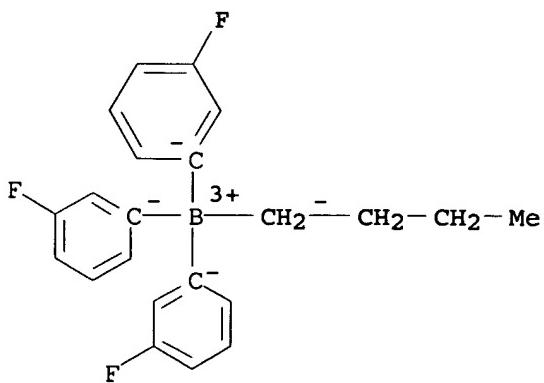
CN 3H-Indolium, 1-heptyl-2-[5-(1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, (T-4)-butyltris(3-fluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

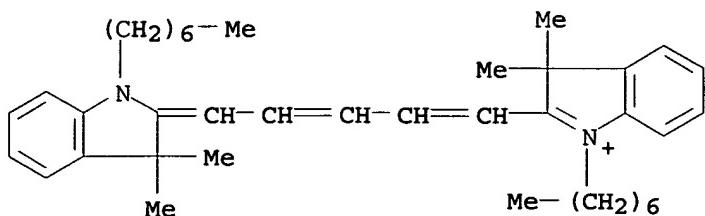
CRN 191726-42-8

CMF C22 H21 B F3

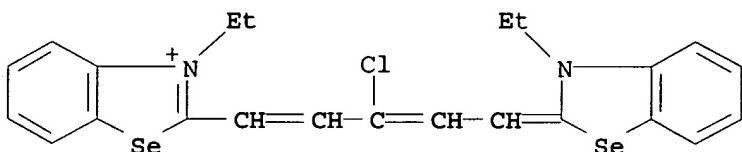
CCI CCS



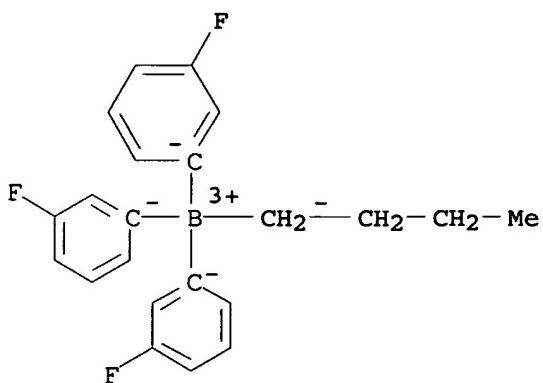
CM 2

CRN 123022-20-8
CMF C39 H55 N2RN 218618-34-9 HCPLUS
CN Benzoselenazolium, 2-[3-chloro-5-(3-ethyl-2(3H)-benzoselenazolylidene)-1,3-pentadienyl]-3-ethyl-, (T-4)-butyltris(3-fluorophenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 218618-33-8
CMF C23 H22 Cl N2 Se2

CM 2

CRN 191726-42-8
CMF C22 H21 B F3
CCI CCS

IC ICM B41M005-26
 ICS B41M005-28; G03F007-004; G03F007-027; G03F007-029; G03F007-26
 CC 74-6 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 IT 199127-03-2 218618-28-1 218618-29-2D, onium derivs.
 218618-30-5 218618-31-6 218618-32-7
 218618-34-9 218618-35-0
 (polymerization initiator; photo- and heat
 -sensitive printing material comprising dye-containing
 microcapsule, organic borate, electron-accepting compound, and vinyl
 monomer)

L36 ANSWER 37 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:782002 HCAPLUS
 DOCUMENT NUMBER: 130:73842
 TITLE: Photo- and heat-sensitive recording material
 and image-formation using same
 INVENTOR(S): Washisu, Shintaro; Fukushige, Yuichi; Usami,
 Tomomasa
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 44 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10319585	A2	19981204	JP 1997-132584	1997 0522
PRIORITY APPLN. INFO.:			JP 1997-132584	1997 0522

OTHER SOURCE(S): MARPAT 130:73842

AB The title material, used in an image-forming process in which it is imagewise irradiated with a secondary higher harmonics obtained from a laser beam by using a nonlinear optical device and also is uniformly heated at a temperature higher than the coloring temperature of the material to form an image thereon, comprises a support with a coating of a recording layer possessing electron-donating colorless dye-containing heat-responsive microcapsules, a radical-generating agent, and either a compound having electron-accepting and polymerizing vinyl monomer portions in its mol. or an electron-accepting color developer and a polymerizing vinyl monomer. An image-recording method comprising the above process is also claimed. The material provides clear, high contrast images by using long wavelength irradiation lasers such as semiconductor lasers without spectrally sensitizing the material.

IT 218132-12-8 218132-14-0
 (photopolymn. initiator; photo- and heat
 -sensitive recording material comprising colorless dye-containing
 microcapsule, electron-accepting compound, vinyl monomer, and
 radical generator)

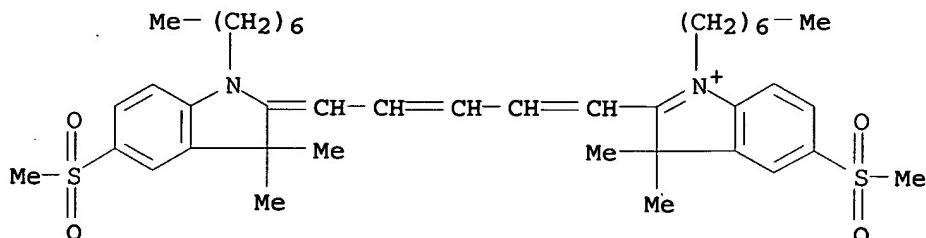
RN 218132-12-8 HCAPLUS

CN 3H-Indolium, 1-heptyl-2-[5-[1-heptyl-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-(methylsulfonyl)-, (T-4)-tris(3-fluorophenyl)(phenylmethyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 218132-11-7

CMF C41 H59 N2 O4 S2

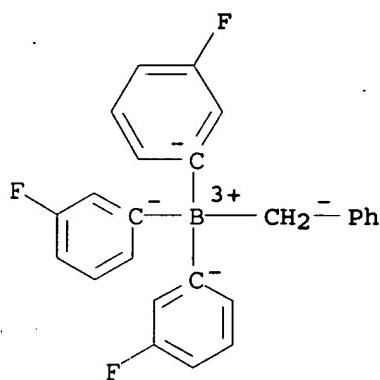


CM 2

CRN 191726-67-7

CMF C25 H19 B F3

CCI CCS



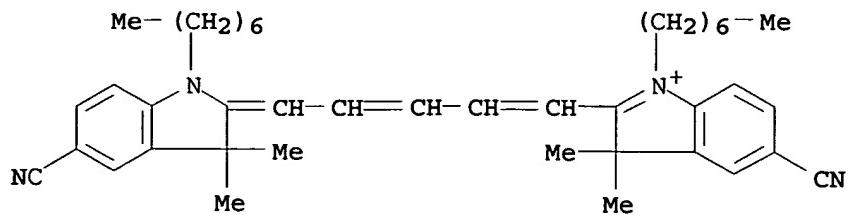
RN 218132-14-0 HCAPLUS

CN 3H-Indolium, 5-cyano-2-[5-(5-cyano-1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-1-heptyl-3,3-dimethyl-, (T-4)-tris(3-fluorophenyl)(phenylmethyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

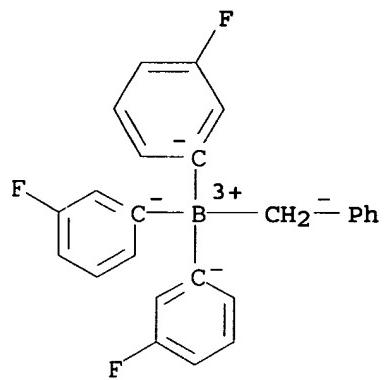
CRN 218132-13-9

CMF C41 H53 N4



CM 2

CRN 191726-67-7
 CMF C25 H19 B F3
 CCI CCS



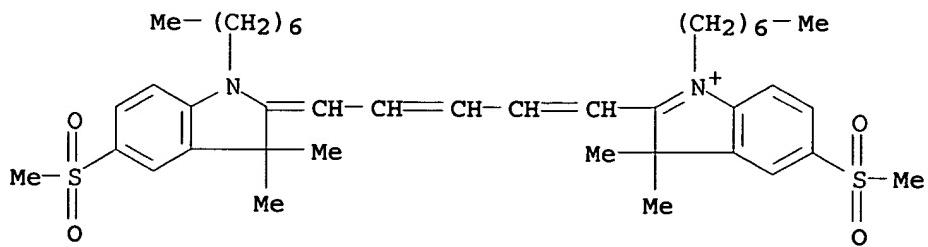
IT 218132-35-5 218132-39-9
 (spectral sensitizer; photo- and heat-sensitive recording material comprising colorless dye-containing microcapsule, electron-accepting compound, vinyl monomer, and radical generator)

RN 218132-35-5 HCPLUS

CN 3H-Indolium, 1-heptyl-2-[5-[1-heptyl-1,3-dihydro-3,3-dimethyl-5-(methylsulfonyl)-2H-indol-2-ylidene]-1,3-pentadienyl]-3,3-dimethyl-5-(methylsulfonyl)-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

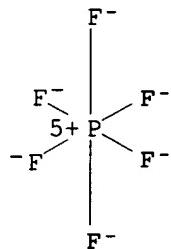
CM 1

CRN 218132-11-7
 CMF C41 H59 N2 O4 S2



CM 2

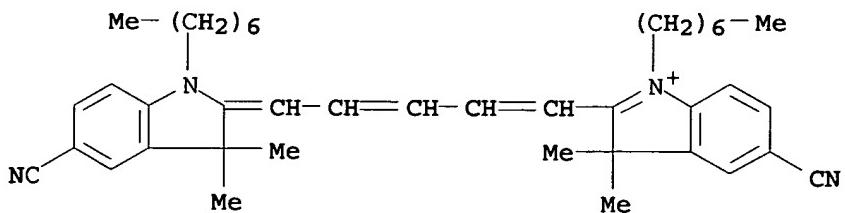
CRN 16919-18-9
 CMF F6 P
 CCI CCS



RN 218132-39-9 HCAPLUS
 CN 3H-Indolium, 5-cyano-2-[5-(5-cyano-1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-1-heptyl-3,3-dimethyl-, hexafluorophosphate(1-) (9CI) (CA INDEX NAME)

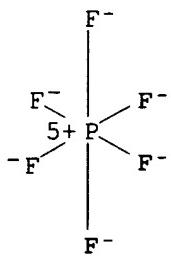
CM 1

CRN 218132-13-9
 CMF C41 H53 N4



CM 2

CRN 16919-18-9
 CMF F6 P
 CCI CCS



IC ICM G03F007-004
 ICS G03F007-004; B41M005-26; B41M005-28; G03F007-029;
 G03F007-095; G03F007-26
 CC 74-4 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 IT 199127-03-2 218132-12-8 218132-14-0
 218132-16-2
 (photopolymn. initiator; photo- and heat
 -sensitive recording material comprising colorless dye-containing
 microcapsule, electron-accepting compound, vinyl monomer, and
 radical generator)
 IT 218132-35-5 218132-39-9
 (spectral sensitizer; photo- and heat-sensitive recording
 material comprising colorless dye-containing microcapsule,
 electron-accepting compound, vinyl monomer, and radical
 generator)

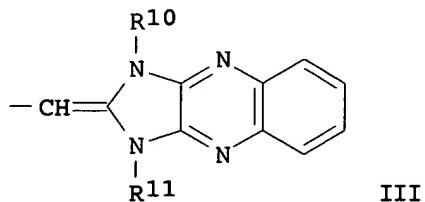
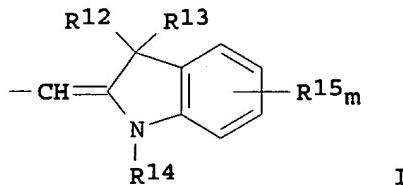
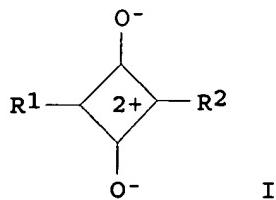
L36 ANSWER 38 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1998:352618 HCAPLUS
 DOCUMENT NUMBER: 129:34443
 TITLE: Photopolymerizable composition
 containing addition-polymerizable
 compound, radical-producing agent,
 and squarylium compound
 INVENTOR(S): Yamaoka, Tsuguo; Koseki, Kenichi; Obara,
 Mitsuharu; Shimizu, Ikuo; Ito, Yukiyoshi;
 Kawato, Hitoshi
 PATENT ASSIGNEE(S): Kyowa Hakko Kogyo Co., Ltd., Japan
 SOURCE: U.S., 11 pp., Cont. of U.S. Ser. No. 204,363,
 abandoned.

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5756258	A	19980526	US 1995-386468	1995 0210
EP 1113335	A1	20010704	EP 2001-106388	1993 0707
EP 1113335 R: CH, DE, FR, GB, LI	B1	20031126		
US 5527659	A	19960618	US 1994-331147	1994

US 6007965	A	19991228	US 1997-946353	1028
				1997
PRIORITY APPLN. INFO.:			JP 1992-185224	1007
				A
				1992
				0713
			US 1993-52999	B1
				1993
				0427
			US 1994-204363	B1
				1994
				0311
			US 1994-331147	A2
				1994
				1028
			JP 1992-113604	A
				1992
				0506
			EP 1993-914964	A3
				1993
				0707
			US 1995-386468	A1
				1995
				0210

OTHER SOURCE(S) : MARPAT 129:34443
GI



AB The present invention relates to a photopolymerizable composition comprising an addition-polymerizable compound which has

at least one ethylenically unsatd. double bond, a radical-producing agent, and a squarylium compound represented by the formula I (R1 = II where R12, R13 = alkyl or R12 and R13 together with the carbon atom to which they are bonded may form a hydrocarbon ring which may be substituted with ≥ 1 halogen atom, an alkyl group, or an alkoxy group; R14 = H, alkyl, aryl, or aralkyl; R15 = halogen, alkyl, aryl, alkoxy, or aralkyl; m = an integer of 0-4 provided that when m = 2-4, two adjacent R15 groups together may form an aromatic ring which may be substituted with ≥ 1 halogen atom, an alkyl group, or an alkoxy group; R2 = III where R10, R11 = H, alkyl, aryl, or aralkyl). The composition is highly sensitive to visible and near IR lights, particularly He-Ne laser, LED, diode laser, etc. having oscillation wavelengths in ≥ 600 nm, and thus is useful as a material for holograms, presensitized plates for laser direct process, dry film resists, digital proofs, and photosensitive microcapsules.

IT

156057-17-9

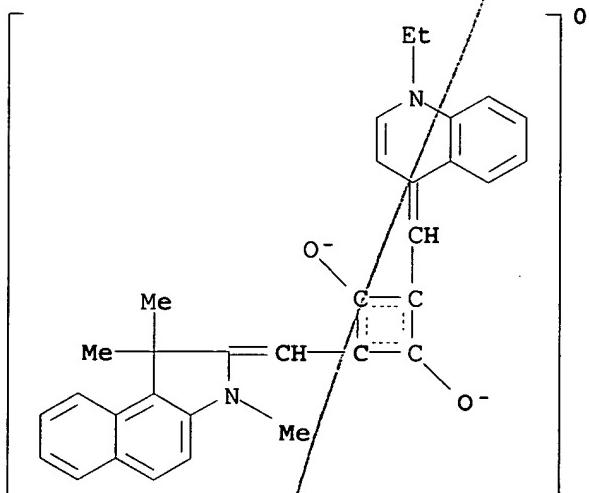
(photopolymerizable compns. for holog. and photolithog. containing)

RN

156057-17-9 HCAPLUS

CN

Cyclobutenediylium, 1-[(1,3-dihydro-1,1,3-trimethyl-2H-benz[e]indol-2-ylidene)methyl]-3-[(1-ethyl-4(1H)-quinolinylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



IT

156057-15-7P

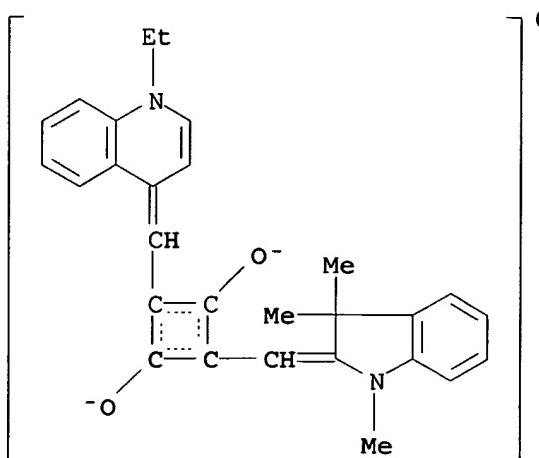
(preparation and use in preparing photopolymerizable compns. for holog. and photolithog.)

RN

156057-15-7 HCAPLUS

CN

Cyclobutenediylium, 1-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-3-[(1-ethyl-4(1H)-quinolinylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



- IC ICM G03C001-73
 INCL 430281100
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST photopolymerizable compn squarylium compd lithog plate; photoresist photopolymerizable compn squarylium compd; holog photopolymerizable compn squarylium compd
 IT Photoresists
 (photopolymerizable compns. containing addition-polymerizable compds., radical-producing agents, and squarylium compds. as)
 IT Holography
 (photopolymerizable compns. containing addition-polymerizable compds., radical-producing agents, and squarylium compds. for)
 IT Lithographic plates
 (photopolymerizable compns. containing addition-polymerizable compds., radical-producing agents, and squarylium compds. for preparation of)
 IT Photoimaging materials
 (photopolymerizable; containing addition-polymerizable compds., radical-producing agents, and squarylium compds.)
 IT 135596-19-9 156057-17-9 159094-57-2
 (photopolymerizable compns. for holog. and photolithog. containing)
 IT 79-41-4D, Methacrylic acid, esters, polymers 3524-68-3, Pentaerythritol triacrylate 6542-67-2, 2,4,6-Tris(trichloromethyl)triazine
 (photopolymerizable compns. for holog. and photolithog. containing squarylium compds. and)
 IT 156057-15-7P 156057-31-7P 156099-24-0P 156764-74-8P
 (preparation and use in preparing photopolymerizable compns. for holog. and photolithog.)
 IT 91-22-5, Quinoline, reactions 118-12-7, 1,3,3-Trimethyl-2-methyleneindoline 605-59-4, N-Ethyllepidinium iodide 2892-63-9 7478-69-5, 1,1-Bis(p-dimethylaminophenyl)ethylene 61699-62-5, 3,4-Diisopropoxy-3-cyclobutene-1,2-dione 155950-65-5, 1,3-Dihexyl-2-methylimidazo[4,5-b]quinoxalinium tosylate 155950-67-7, 1,3-Dibutyl-2-methylimidazo[4,5-b]quinoxalinium tosylate

(reaction in preparing squarylium compds. for photopolymerizable compns. for holog. and photolithog.)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L36 ANSWER 39 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:556650 HCPLUS

DOCUMENT NUMBER: 127:234936

TITLE: Photopolymerization of acrylates with borate-based photoinitiators sensitive in the infrared

AUTHOR(S): Anon.

CORPORATE SOURCE: UK

SOURCE: Research Disclosure (1997), 400 (Aug.), P493-P495 (No. 40013)

CODEN: RSDSBB; ISSN: 0374-4353

PUBLISHER: Kenneth Mason Publications Ltd.

DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
RD 400013		19970810		

PRIORITY APPLN. INFO.: RD 1997-400013

19970810

AB Combination of a wide variety with borate salts with infra-red dyes and pigments affords highly reactive radical photoinitiators for coating compns. or emulsion polymerization active under visible broad band or monochromatic laser irradiation

IT 102185-03-5, IR 786

(IR 786; photopolymerization of acrylates with borate-based photoinitiators sensitive in the IR)

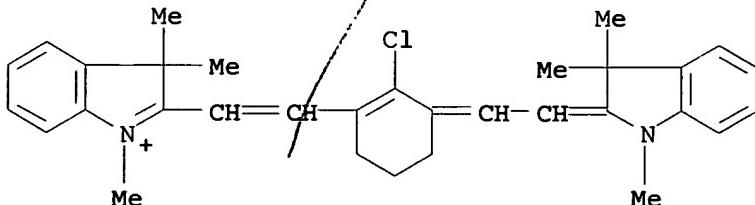
RN 102185-03-5 HCPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)ethylidene]-1-cyclohexen-1-yl]ethenyl]-1,3,3-trimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 69415-17-4

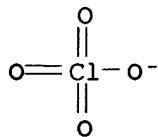
CMF C32 H36 Cl N2



CM 2

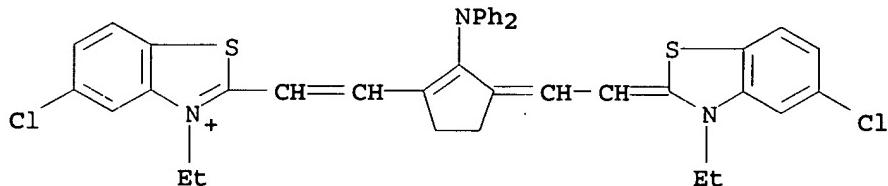
CRN 14797-73-0

CMF Cl O4

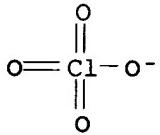


- IT 53655-17-7, IR 140 (dye)
 (photopolymn. of acrylates with borate-based
 photoinitiators sensitive in the IR)
- RN 53655-17-7 HCAPLUS
- CN Benzothiazolium, 5-chloro-2-[2-[3-[(5-chloro-3-ethyl-2(3H)-
 benzothiazolylidene)ethylidene]-2-(diphenylamino)-1-cyclopenten-1-
 yl]ethenyl]-3-ethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 53655-16-6
 CMF C39 H34 Cl2 N3 S2

CM 2

CRN 14797-73-0
 CMF Cl O4

- CC 37-3 (Plastics Manufacture and Processing)
 Section cross-reference(s): 41, 42
- ST boron compd IR dye photopolymn catalyst; acrylate polymn
 boron compd dye initiator
- IT Polymerization catalysts
 Polymerization catalysts
 (photocem., radical; photopolymn. of acrylates with
 borate-based photoinitiators sensitive in the IR)
- IT 102185-03-5, IR 786
 (IR 786; photopolymn. of acrylates with borate-based
 photoinitiators sensitive in the IR)
- IT 4197-25-5, Ceres Black BN 7440-42-8D, Boron, compds., uses
 53655-17-7, IR 140 (dye) 191876-10-5 195215-36-2, KF

615PIN A 195215-37-3, KF 628PIN A 195215-38-4, KF 674PIN A
 195215-39-5, KF 810PIN A
 (photopolymn. of acrylates with borate-based
 photoinitiators sensitive in the IR)

L36 ANSWER 40 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1997:496514 HCAPLUS
 DOCUMENT NUMBER: 127:115281
 TITLE: Photosensitive composition
 containing novel sensitizing dyes and
 radical-generating agent
 INVENTOR(S): Katsuta, Ai; Takeyama, Toshihisa; Kawamura,
 Tomonori; Koshizuka, Kunihiro
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 09134008	A2	19970520	JP 1995-311640	1995 1107
PRIORITY APPLN. INFO.:			JP 1995-311640	1995 1107

GI

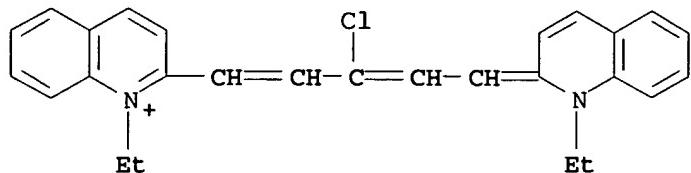
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
 *

AB The photosensitive composition comprises (1) ≥1 dye with $630 \leq \lambda_{max} \leq 739$ nm selected from I ($W_1 =$ alkyl; $Z_{1,2}$ = group of atoms for forming 5-7-membered heterocyclyl; $V_1 = N, S, O$; $A =$ vinyl-based polymeric substituent), II ($R_{7-10} =$ halo, alkyl; $R_{11-14} = H, halo, alkyl, cyano, etc.$; $W_2 =$ alkyl; $Z_3 =$ group of atoms for forming 5-7-membered heterocyclyl; $Y^- =$ counter anion; $n, o = 0, integer higher than 1; (n + o) \geq 1$), III ($W_3 = O, S$; $Z_{4,5} =$ group of atoms for forming 5-7-membered heterocyclyl; $p = 0, integer higher than 1$), and IV ($A = O, S, Se, etc.$; $R_{15-19} = H, halo, cyano, etc.$), (2) an organic peroxide, (3) a diphenyliodonium salt, and (4) a compound selected from $M^+ [R_{20}R_{21}R_{22}R_{23}B^-]$ ($R_{20-23} =$ cyano, alkyl, alkenyl, etc.; $M^+ =$ counter cation) and V ($R_{24,25} = H, cyano, alkyl, etc.$; $X =$ halo; $Z_6 =$ group of atoms for forming 5-7-membered heterocyclyl; $D = N, O$). The photosensitive composition may be used as a mask on a presensitized lithog. printing plate. The photosensitive compn exhibited high sensitivity toward semiconductor lasers.

IT 64285-44-5 143313-92-2 192395-10-1
 (photosensitive composition containing novel sensitizing dyes and radical-generating agent)

RN 64285-44-5 HCPLUS

CN Quinolinium, 2-[3-chloro-5-(1-ethyl-2(1H)-quinolinylidene)-1,3-pentadienyl]-1-ethyl-, bromide (9CI) (CA INDEX NAME)

● Br⁻

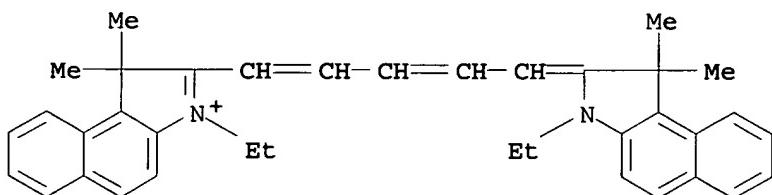
RN 143313-92-2 HCPLUS

CN 1H-Benz[e]indolium, 3-ethyl-2-[5-(3-ethyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)-1,3-pentadienyl]-1,1-dimethyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 142382-81-8

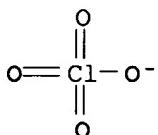
CMF C37 H39 N2



CM 2

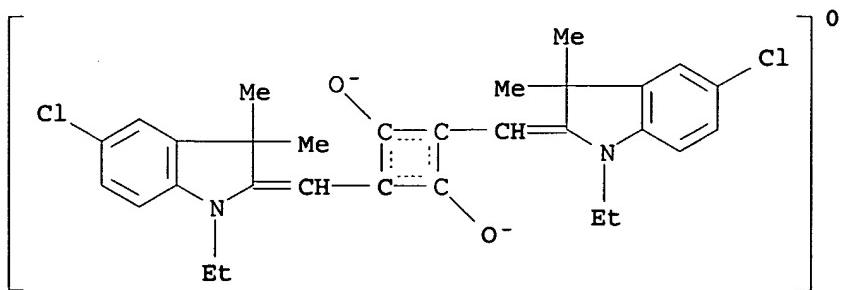
CRN 14797-73-0

CMF Cl O4



RN 192395-10-1 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(5-chloro-1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



IC ICM G03F007-028
 ICS G03C001-73; G03F007-004
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST photosensitive compn sensitizing dye radical generator; presensitized lithog printing plate mask compn
 IT Photoimaging materials
 (photosensitive composition containing novel sensitizing dyes and radical-generating agent)
 IT Photomasks (lithographic masks)
 (photosensitive composition for)
 IT Lithographic plates
 (presensitized; photosensitive composition for)
 IT 2156-29-8 4727-50-8 52902-47-3 64285-44-5
 143313-92-2 169312-10-1 192331-94-5
 192395-10-1
 (photosensitive composition containing novel sensitizing dyes and radical-generating agent)
 IT 6542-67-2 58109-40-3 65859-86-1 188348-58-5
 (radical-generating agent; photosensitive composition containing novel sensitizing dyes and radical-generating agent)

L36 ANSWER 41 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

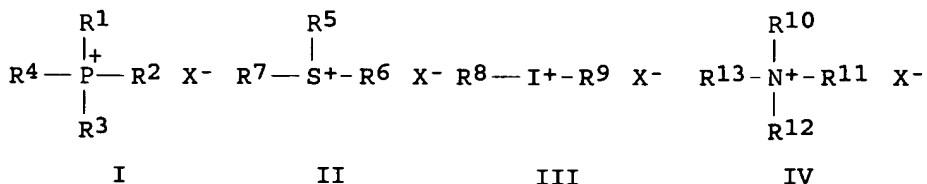
ACCESSION NUMBER: 1997:480651 HCAPLUS
 DOCUMENT NUMBER: 127:101775
 TITLE: Photoradical generating agent, photopolymerizable composition, and process of presensitized lithographic printing plate
 INVENTOR(S): Nakayama, Noritaka
 PATENT ASSIGNEE(S): Konica Co., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 24 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09134009	A2	19970520	JP 1995-291286	1995 1109

PRIORITY APPLN. INFO.: JP 1995-291286

1995
1109

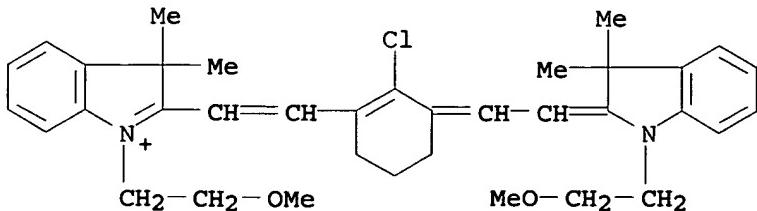
GI



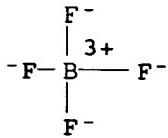
AB In the photoradical generating agent containing an onium salt represented by I, II, III, and IV (R^1-4 , R^{10-12} = alkyl, aryl, aralkyl; R^5-7 = alkyl, aryl; $\text{R}^8,9$ = aryl; X^- = counter ion), a radical generating agent, and carbon black, the onium salt and/or the radical generating agent is adsorbed on carbon black. The counter ion may be a halogen ion. The radical generating agent may be a bisimidazole derivative. The composition is used for a photosensitive layer of a presensitized lithog. printing plate, in which the photosensitive layer contains a compound having ≥ 1 ethylenic unsatd. bond, a binder, and the photoradical generating agent. The presensitized lithog. printing plate is exposed by a laser beam, and then unexposed areas of the protective layer and the photosensitive layer are eluted. A high concentration of the photoradical was generated by irradiating IR light.

IT 173474-43-6

(photopolymerizable composition in presensitized lithog. printing plate)

RN 173474-43-6 HCAPLUS**CN** 3H-Indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-1-(2-methoxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-(2-methoxyethyl)-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)**CM** 1**CRN** 102185-06-8**CMF** C36 H44 Cl N2 O2**CM** 2**CRN** 14874-70-5

CMF B F4
CCI CCS



IC ICM G03F007-029
ICS C07F009-54; C08F002-50; G03F007-031; C07C381-12
CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 35, 38
ST photoradical generator presensitized lithog printing plate
IT Lithographic plates
(photopolymerizable composition in presensitized lithog. printing plate)
IT Carbon black, uses
(photopolymerizable composition in presensitized lithog. printing plate)
IT 869-51-2, Tris(2-hydroxyethyl)sulfonium chloride 1643-19-2,
Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide 3462-97-3, 4-Methoxybenzyltriphenylphosphonium chloride 4189-82-6 5197-95-5, Benzyltriethylammonium bromide 5667-47-0
14937-42-9, Tetra(decyl)ammonium bromide 25316-59-0,
Benzyltributylammonium bromide 58377-39-2
(photopolymerizable composition in presensitized lithog. printing plate)
IT 2256-48-6 12157-31-2 108961-97-3 109347-70-8 110930-60-4
173474-43-6
(photopolymerizable composition in presensitized lithog. printing plate)
IT 90-94-8 1707-68-2 82799-44-8 189515-41-1
(photoradical generating agent in composition in presensitized lithog. printing plate)

L36 ANSWER 42 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:265561 HCAPLUS
DOCUMENT NUMBER: 126:257074
TITLE: Water-less lithographic plates
INVENTOR(S): Bennett, Peter Andrew Reath; Smith, Carole-Anne
PATENT ASSIGNEE(S): Horsell Graphic Images Limited, UK; Bennett, Peter Andrew Reath; Smith, Carole-Anne
SOURCE: PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
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WO 9707430	A1	19970227	WO 1996-GB1974	1996

0813

W: AU, BR, CA, CN, GB, JP, MX, NZ, RU, US
 RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
 NL, PT, SE

CA 2229536	AA	19970227	CA 1996-2229536	
				1996
				0813
AU 9667475	A1	19970312	AU 1996-67475	
				1996
				0813
EP 845116	A1	19980603	EP 1996-927771	
				1996
				0813
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE				
CN 1192811	A	19980909	CN 1996-196256	
				1996
				0813
JP 11119416	A2	19990430	JP 1998-75163	
				1996
				0813
BR 9610224	A	19991221	BR 1996-10224	
				1996
				0813
JP 2000513455	T2	20001010	JP 1997-509042	
				1996
				0813
US 6187511	B1	20010213	US 1998-11436	
				1998
				0211
PRIORITY APPLN. INFO.:			GB 1995-16694	A
				1995
				0815
			JP 1997-509042	A3
				1996
				0813
			WO 1996-GB1974	W
				1996
				0813

AB There is described a method of preparing a water-less lithog plate which comprises a support having an oleophilic surface, there being coated on the support a mixture which comprises as one component an ink-repellent and water-repellent polymer or a mixture of such polymers or a polymer precursor, and as the other essential component of the mixture a photosensitive or heat sensitive composition selected from (a) an organic solvent soluble diazo composition which is either light or heat sensitive, (b) a photopolymer together with a sensitizer which is either light or heat sensitive or (c) a mixture of a free-radically polymerizable ethylenically unsatd. compound or compds. and a photoinitiator which is either heat or light sensitive, the ratio of ink-repellent polymer to photosensitive or heat sensitive composition (a), (b), or (c) in the mixture being from 20-80 ink-repellent polymer to 80-20 photosensitive or heat sensitive composition by weight, imagewise acting on exposing the coating process mixture, developing the acted on mixture with the appropriate developing solution depending on the composition (a), (b), (c) used to remove the composition and the

water-repellent polymer in the unacted-on areas to reveal the oleophilic surface of the support in the unacted-on areas of the plate and leaving the acted on areas of the plate.

IT 188435-88-3

(sensitizer contained in coating composition for lithog. plate)

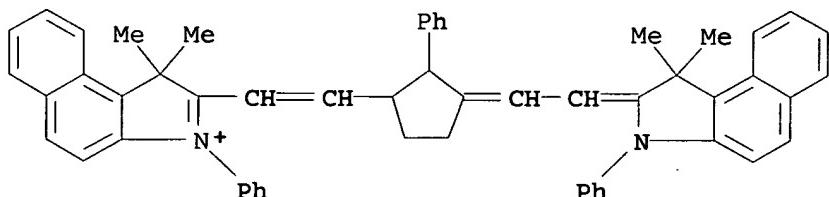
RN 188435-88-3 HCAPLUS

CN 1H-Benz[e]indolium, 2-[2-[3-[((1,3-dihydro-1,1-dimethyl-3-phenyl-2H-benz[e]indol-2-ylidene)ethylidene]-2-phenylcyclopentyl]ethenyl]-1,1-dimethyl-3-phenyl-, perchlorate (9CI) (CA INDEX NAME)

CM 1

CRN 188435-87-2

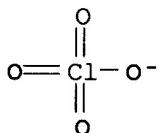
CMF C55 H49 N2



CM 2

CRN 14797-73-0

CMF Cl O4



IC ICM G03F007-004
ICS G03F007-075

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST water less lithog plate; ink repellent polymer
lithog plate

IT Polysiloxanes, processes
(Syl-off 7920; contained in coating composition for
lithog. plate)

IT Polysiloxanes, processes
(di-Me; contained in coating composition for
lithog. plate)

IT Lithographic plates
(having oleophilic surface coated with mixture of ink-repellent
and water-repellent polymers and other components)

IT 188596-59-0, Syl-off 7922
(catalyst; curing agent contained in coating composition
for lithog. plate)

IT 9016-00-6, Poly(dimethylsiloxane) 9016-00-6D, Polydimethyl
siloxane, vinyl dimethyl-terminated 25068-38-6, Epikote 1004

31900-57-9, Poly(dimethylsiloxane) 31900-57-9D, Polydimethyl siloxane, vinyl dimethyl-terminated 79586-36-0, Asahiguard A.G.
 550 153743-82-9, DSO 19 156118-35-3, Dimethyl silanediol-methyl silanol copolymer 169314-57-2, Zonyl 8070
 188596-57-8, RO-C OC15
 (contained in coating composition for lithog. plate)

IT 492-22-8, Thioxanthone 188435-88-3
 (sensitizer contained in coating composition for lithog. plate)

L36 ANSWER 43 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1997:253582 HCPLUS

DOCUMENT NUMBER: 126:244890

TITLE: Photopolymerizing composition,
 image-forming material, radical
 generation, photosensitive material
 for preparing lithographic plate,
 and preparation of lithographic
 plate

INVENTOR(S): Nakayama, Noritaka

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
JP 09034110	A2	19970207	JP 1995-180086	1995 0717
PRIORITY APPLN. INFO.:			JP 1995-180086	1995 0717

OTHER SOURCE(S): MARPAT 126:244890

AB The title composition contains a polymerizing compound, ≥ 1 onium salt selected from R1P+R2R3R4 X-, R5S+R6R7 X-, R8I+R9 X-, and R10N+R11R12R13 X- (R1-4, R10-13 = alkyl, aryl, aralkyl, R1-4 or R10-13 may form a ring; R5-7 = alkyl, aryl, R5-7 may form a ring; R8, R9 = aryl; X- = counter anion), a light-heat-converting element, and a radical-generating agent. The image-forming material comprises the composition containing the onium salt in which the counter anion is Cl- or Br-. Radicals are generated by irradiation of the composition using IR rays. The photosensitive material comprises a hydrophilic support with coatings of a photosensitive layer containing a compound having ≥ 1 ethylenic unsatd. bond, a binder, ≥ 1 of the above onium salts, a light-heat-converting element, and a radical-generating agent and a protective layer. The material is imagewise exposed under semiconductor laser scanning followed by removing the protective layer and the unexposed areas of the photosensitive layer to give a lithog. printing plate. The composition provides high sensitive and high resolution images using IR rays and shows good storage stability.

IT 173474-43-6

(light-heat conversion agent; photosensitive lithog.
plate prepared from composition containing onium compound by
semiconductor laser scanning)

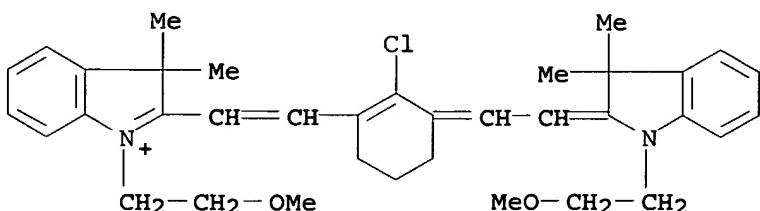
RN 173474-43-6 HCPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-1-(2-methoxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-(2-methoxyethyl)-3,3-dimethyl-, tetrafluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 102185-06-8

CMF C36 H44 Cl N2 O2

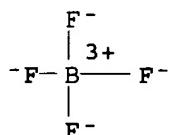


CM 2

CRN 14874-70-5

CMF B F4

CCI CCS



IC ICM G03F007-029

ICS B41C001-00; G03F007-00; G03F007-004; G03F007-027;
G03F007-031; G03F007-20

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST photopolymerizable compn onium salt; sulfonium salt
photopolymerizable compn; ammonium salt
photopolymerizable compn; light heat conversion agent;
radical initiator photopolymerizable compn;
photosensitive lithog plate onium salt; semiconductor
laser scanning lithog plate; IR ray radical
generator

IT Phosphonium compounds

Quaternary ammonium compounds, uses
(photosensitive lithog. plate prepared from
composition containing onium compound by semiconductor laser
scanning)

IT Lithographic plates

(photosensitive; photosensitive lithog. plate prepared

from composition containing onium compound by semiconductor laser scanning)

IT 12157-31-2 108961-97-3 109347-70-8 110930-60-4
173474-43-6
 (light-heat conversion agent; photosensitive lithog. plate prepared from composition containing onium compound by semiconductor laser scanning)

IT 56-37-1, Benzyltriethylammonium chloride 869-51-2 1643-19-2, Tetrabutylammonium bromide 3115-68-2, Tetrabutylphosphonium bromide 3462-97-3 4189-82-6, Diphenyl(p-methylphenyl)sulfonium bromide 5667-47-0 14866-34-3, Tetradodecylammonium bromide 25316-59-0, Benzyltributylammonium bromide 58377-39-2, Bis(P-tert-butylphenyl)iodonium bromide (photosensitive lithog. plate prepared from composition containing onium compound by semiconductor laser scanning)

IT 1707-68-2 29777-36-4 71002-23-8 188348-58-5
 (radical initiator; photosensitive lithog. plate prepared from composition containing onium compound by semiconductor laser scanning)

L36 ANSWER 44 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1996:422455 HCPLUS

DOCUMENT NUMBER:

125:71871

TITLE:

Photopolymerizable composition containing squarylium compound

INVENTOR(S):

Yamaoka, Tsuguo; Koseki, Kenichi; Shimizu, Ikuro; Toyoda, Hiroshi; Kinoshita, Hirotaka; Matsushita, Shoshiro

PATENT ASSIGNEE(S):

Kyowa Hakko Kogyo Co., Ltd., Japan

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----
WO 9609289	A1	19960328	WO 1995-JP1894	1995 0920
W: CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2176931	AA	19960328	CA 1995-2176931	1995 0920
EP 729945	A1	19960904	EP 1995-932192	1995 0920
EP 729945	B1	20020227		
R: BE, CH, DE, FR, GB, LI, NL				
JP 3404046	B2	20030506	JP 1996-510752	1995 0920
US 5681685	A	19971028	US 1996-648136	1996 0521

PRIORITY APPLN. INFO.:

JP 1994-226568

A

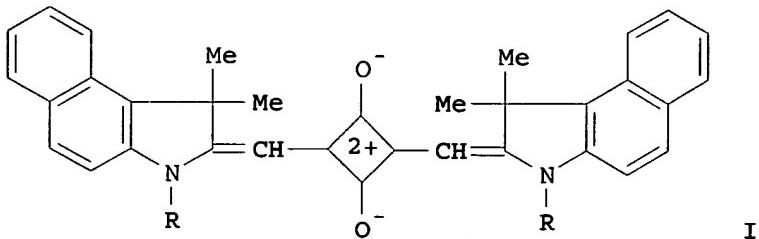
1994
0921

WO 1995-JP1894

W

1995
0920OTHER SOURCE(S):
GI

MARPAT 125:71871

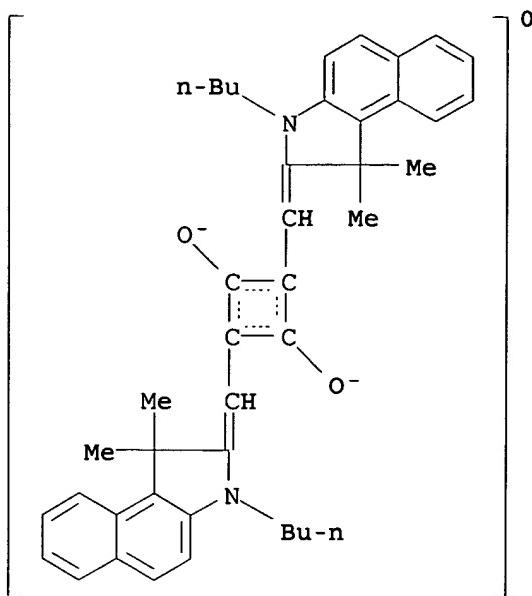


AB A photopolymerizable composition comprises a squarylium compound represented by I, a free-radical generator and an addition-polymerizable compound having at least one ethylenic unsatn., wherein R represents C2-C8 alkyl. This composition can be used for presensitized plates and dry film resists.

IT 125597-36-6P 138496-68-1P 178563-74-1P
178563-75-2P 178563-76-3P 178563-77-4P
178563-78-5P 178563-79-6P
(polymerizable composition containing)

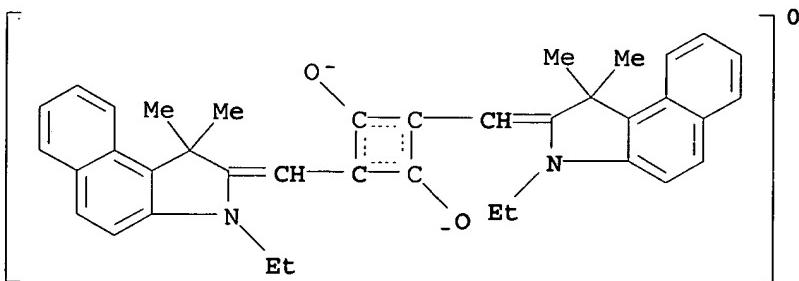
RN 125597-36-6 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(3-butyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt)
(9CI) (CA INDEX NAME)



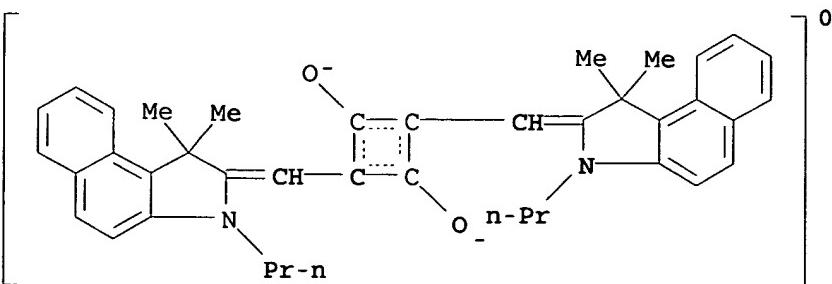
RN 138496-68-1 HCAPLUS

CN Cyclobutenediylium, 1,3-bis[(3-ethyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt)
(9CI) (CA INDEX NAME)



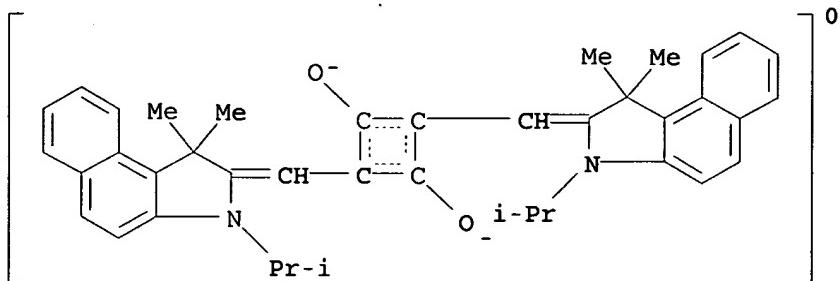
RN 178563-74-1 HCAPLUS

CN Cyclobutenediylium, 1,3-bis[(1,3-dihydro-1,1-dimethyl-3-propyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt)
(9CI) (CA INDEX NAME)



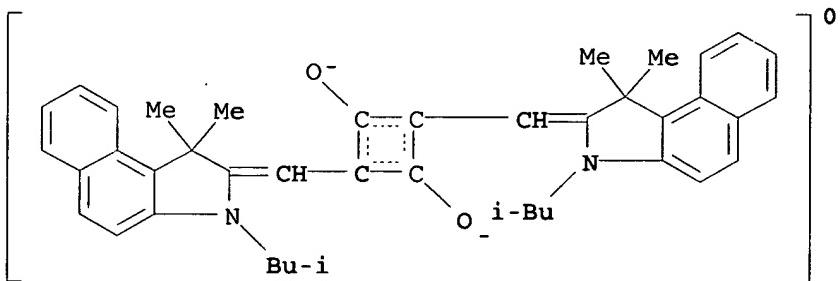
RN 178563-75-2 HCPLUS

CN Cyclobutenediylium, 1,3-bis[[1,3-dihydro-1,1-dimethyl-3-(1-methylethyl)-2H-benz[e]indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



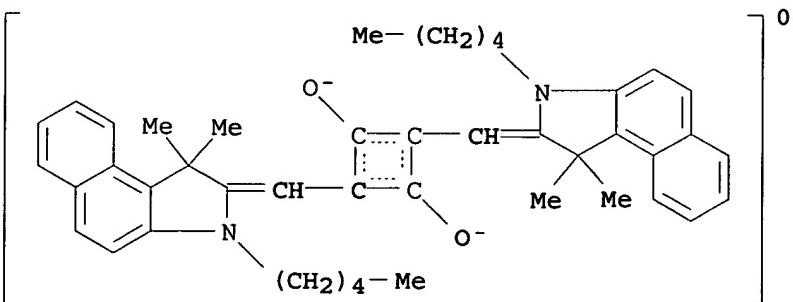
RN 178563-76-3 HCPLUS

CN Cyclobutenediylium, 1,3-bis[[1,3-dihydro-1,1-dimethyl-3-(2-methylpropyl)-2H-benz[e]indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



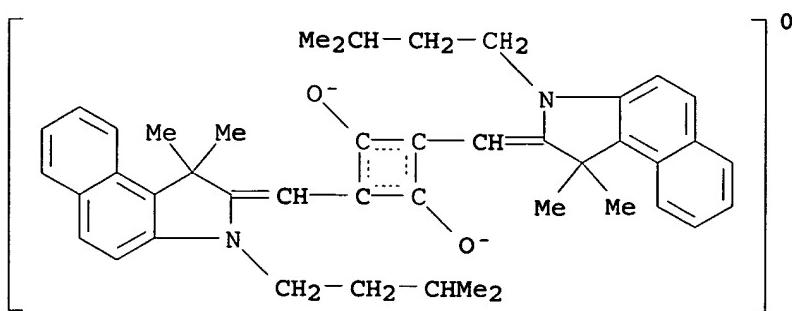
RN 178563-77-4 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(1,3-dihydro-1,1-dimethyl-3-pentyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)

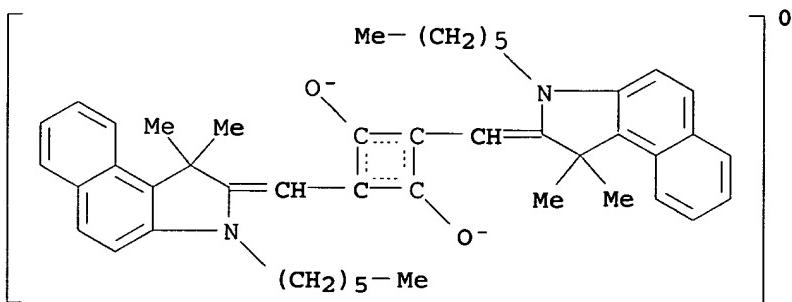


RN 178563-78-5 HCPLUS

CN Cyclobutenediylium, 1,3-bis[[1,3-dihydro-1,1-dimethyl-3-(3-methylbutyl)-2H-benz[e]indol-2-ylidene]methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 178563-79-6 HCPLUS

CN Cyclobutenediylium, 1,3-bis[(3-hexyl-1,3-dihydro-1,1-dimethyl-2H-benz[e]indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt)
(9CI) (CA INDEX NAME)IC ICM C07D209-60
ICS C08F002-48CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and
Other Reprographic Processes)

ST squarylium compd polymerizable compn resist

IT Lithographic plates
Resists

(photopolymerizable composition containing squarylium compound)

IT Onium compounds

(squarylium, polymerizable composition containing)

IT 125597-36-6P 138496-68-1P 178563-74-1P

178563-75-2P 178563-76-3P 178563-77-4P

178563-78-5P 178563-79-6P

(polymerizable composition containing)

L36 ANSWER 45 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:543437 HCPLUS

DOCUMENT NUMBER: 122:303100

TITLE: Material and method for thermal transfer image
formationINVENTOR(S): Takeyama, Toshihisa; Miura, Akio; Komamura,
Tawara

PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 40 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06262861	A2	19940920	JP 1993-52494	
				1993 0312
PRIORITY APPLN. INFO.:			JP 1993-52494	
				1993 0312

AB The title image forming material comprises on its support a coloring layer containing a thermal diffusive dye having a **polymerizable** unsatd. double bond, a compound made up of a cationic dye and a borate anion, and/or another compound made up of a transition metal coordination complex and a borate anion. An image is formed by imagewise exposing the above image forming material to light to **polymerize** the thermal diffusive dye, placing a dye receptor over the image forming material, and applying heat and pressure to transfer the thermal diffusive dye to the dye receptor. High resolution and good color reproducibility are achieved.

IT 141714-63-8
(photopolymn. initiator for thermal transfer recording material)

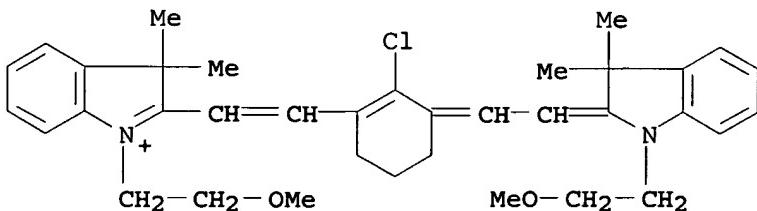
RN 141714-63-8 HCPLUS

CN 3H-Indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-1-(2-methoxyethyl)-3,3-dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-1-(2-methoxyethyl)-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 102185-06-8

CMF C36 H44 Cl N2 O2

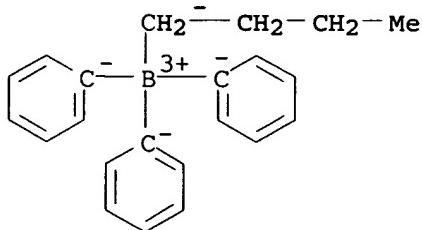


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



IC ICM B41M005-30
 ICS B41M005-26; G03F007-004; G03F007-027; G03F007-029; G03F007-26
 CC 74-7 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 IT 141714-54-7 141714-63-8 163021-54-3 163046-02-4
 (photopolymn. initiator for thermal
 transfer recording material)

L36 ANSWER 46 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1995:394841 HCAPLUS
 DOCUMENT NUMBER: 122:174586
 TITLE: Dye image-receiving material of
 thermal-transfer recording material and
 formation of image by using same
 INVENTOR(S): Takeyama, Toshihisa; Miura, Akio; Nakayama,
 Noritaka; Komamura, Tawara
 PATENT ASSIGNEE(S): Konishiroku Photo Ind, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 31 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

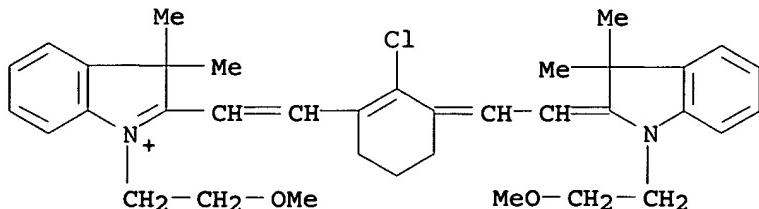
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06270569	A2	19940927	JP 1993-66732	1993 0325
JP 3385477	B2	20030310	JP 1993-66732	1993 0325

PRIORITY APPLN. INFO.:

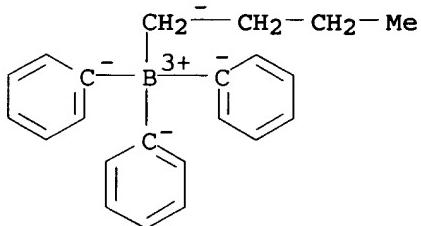
AB In the dye image-receiving material comprising an ink layer containing
 a thermally diffusive dye, a dye containing an ethylenic unsatd.
 double bond, and a dye-releasing substance, a dye-receiving layer
 of the material contains a polymerization initiator as an
 essential component. Formation of an image uses light and/or
 thermal energy to initiate polymerization
 IT 141714-63-8
 (polymerization initiator; thermal
 -transfer recording material)
 RN 141714-63-8 HCAPLUS
 CN 3H-Indolium, 2-[2-[2-chloro-3-[[1,3-dihydro-1-(2-methoxyethyl)-3,3-
 dimethyl-2H-indol-2-ylidene]ethylidene]-1-cyclohexen-1-yl]ethenyl]-
 1-(2-methoxyethyl)-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-)

(9CI) (CA INDEX NAME)

CM 1

CRN 102185-06-8
CMF C36 H44 Cl N2 O2

CM 2

CRN 47252-39-1
CMF C22 H24 B
CCI CCS

IC ICM B41M005-40
ICS G03C008-40

CC 74-10 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST polymn initiator dye image receptor; thermal transfer recording material

IT Polymerization catalysts (photochem., thermal-transfer recording materials)

IT Polymerization catalysts (thermal, thermal-transfer recording materials)

IT 15243-31-9 120307-06-4 141714-54-7 141714-63-8
153177-34-5 161376-52-9 (polymerization initiator; thermal-transfer recording material)

L36 ANSWER 47 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:689655 HCAPLUS

DOCUMENT NUMBER: 121:289655

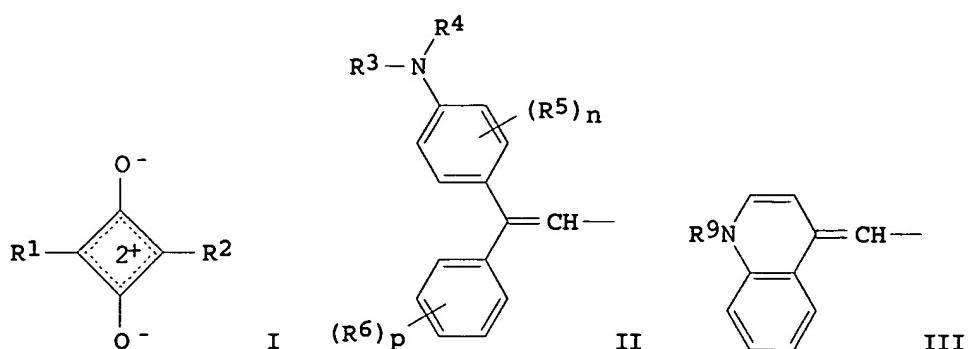
TITLE: Photopolymerizable composition containing squaraines

INVENTOR(S): Yamaoka, Tsuguo; Koseki, Kenichi; Obara, Mitsuharu; Shimizu, Ikuo; Ito, Yukiyoski; Kawato, Hitoshi

PATENT ASSIGNEE(S) : Kyowa Hakko Kogyo Co., Ltd., Japan
 SOURCE: PCT Int. Appl., 37 pp.
 CODEN: PIIXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9401806	A1	19940120	WO 1993-JP932	1993 0707
				W: CA, JP, US RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
EP 611997	A1	19940824	EP 1993-914964	1993 0707
EP 611997	B1	20030212		
R: CH, DE, FR, GB, LI				
EP 1113335	A1	20010704	EP 2001-106388	1993 0707
EP 1113335	B1	20031126		
R: CH, DE, FR, GB, LI				
JP 3202989	B2	20010827	JP 1994-503173	1993 0707
CA 2118604	C	20040706	CA 1993-2118604	1993 0707
PRIORITY APPLN. INFO.:			JP 1992-185224	A 1992 0713
			EP 1993-914964	A3 1993 0707
			WO 1993-JP932	W 1993 0707

GI



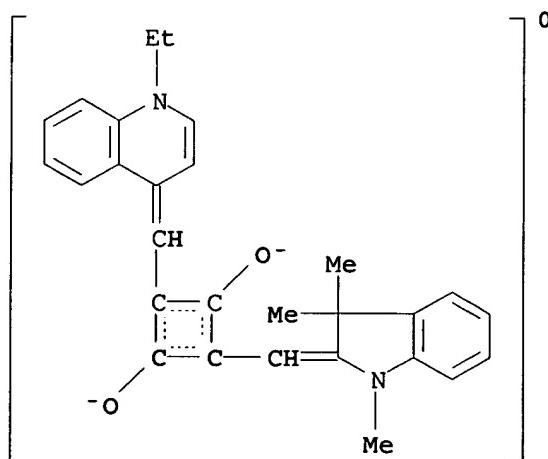
AB The title photopolymerizable composition contains an addition-polymerizable compound having ≥ 1 ethylenically unsatd. double bond (s), a free-radical generator, and a squarylium compound I [R₁, R₂ = II (R₃, 4 = H, alkyl, aryl, aralkyl; R₅ = halo, alkyl, alkoxy, nitro, OH; n = 0-4; when n = 2-4, R₅ may be the same or different; R₆ = R₅, CN, trifluoromethyl, NR₇R₈; R₇, R₈ = R₃; p = 0-5, when p = 2-5, R₆ may be the same or different), III (R₉ = alkyl), etc.]. The composition is highly sensitive to visible and near-IR rays, especially, a He-Ne laser, a light-emitting diode, a semiconductor laser, etc., each emitting light having a wavelength range >600 nm; the composition is useful as the material of holograms, presensitized lithog. plates for laser direct platemaking, dry film resists, digital proof, photosensitive microcapsules, etc.

IT 156057-15-7 156057-17-9

(preparation of squaraines for photopolymerizable composition highly sensitive to visible and near-IR rays)

RN 156057-15-7 HCPLUS

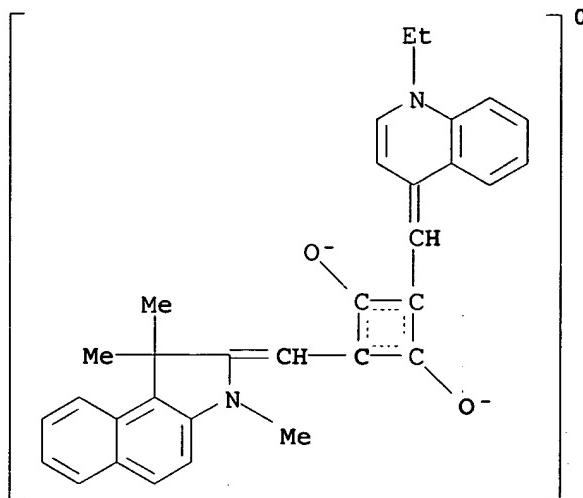
CN Cyclobutenediylium, 1-[(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)methyl]-3-[(1-ethyl-4(1H)-quinolinylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 156057-17-9 HCPLUS

CN Cyclobutenediylium, 1-[(1,3-dihydro-1,1,3-trimethyl-2H-

benz[e]indol-2-ylidene)methyl]-3-[(1-ethyl-4(1H)-
quinolinylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA
INDEX NAME)



- IC ICM G03F007-031
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST near IR photopolymer compn squaraine
 IT Resists
 (photo-, dry-film; photopolymerizable composition highly sensitive to visible and near-IR rays for)
 IT Photoimaging compositions and processes
 (photopolymerizable, photopolymerizable composition highly sensitive to visible and near-IR rays)
 IT Lithographic plates
 (presensitized, photopolymerizable composition highly sensitive to visible and near-IR rays for)
 IT 3524-68-3, Pentaerythritol triacrylate 6542-67-2, 2, 4,
 6-Tris(trichloromethyl)-s-triazine
 (photopolymerizable composition highly sensitive to visible and near-IR rays)
 IT 156057-15-7 156057-17-9 159094-53-8
 159094-54-9 159094-55-0 159094-56-1
 (preparation of squaraines for photopolymerizable composition highly sensitive to visible and near-IR rays)
 IT 135596-19-9 159094-57-2
 (squaraines for photopolymerizable composition highly sensitive to visible and near-IR rays)

L36 ANSWER 48 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:311681 HCPLUS

DOCUMENT NUMBER: 120:311681

TITLE: Thermal recording materials for infrared laser recording

INVENTOR(S): Fukushige, Juichi

PATENT ASSIGNEE(S): Fuji Photo Film Co Ltd, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.

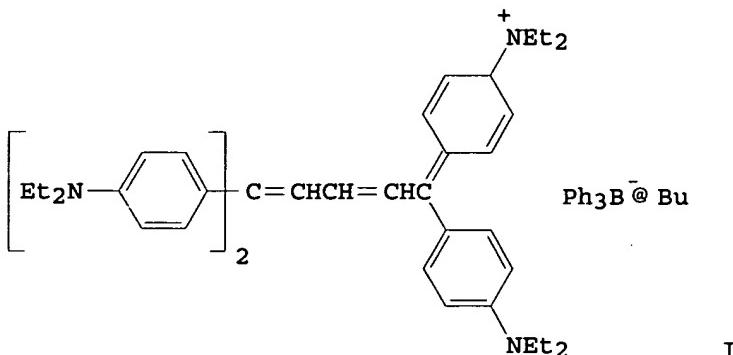
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05318909	A2	19931203	JP 1992-123679	1992 0515
PRIORITY APPLN. INFO.:			JP 1992-123679	1992 0515

GI



AB The materials for IR laser recording are prepared by coating, on a support, an electron-donating colorless dye-containing microcapsules, and a solution containing a photohardenable composition comprising a polymerizable group-containing electron-accepting compound and a photopolymer. initiator which is a near IR-absorbing polymer initiator with photosensitivity at ≥ 600 nm. The materials have high whiteness backgrounds and provide high quality images by IR laser beam exposure followed by heat development. Thus, a PET film was coated with a composition containing 3,3-bis(1-octyl-2-methylindol-3-yl)phthalide-containing microcapsules, 6-methacryloyloxyhexyl 3-chloro-4-hydroxybenzoate, and IR 820B (I) and with a protective layer to give a thermal recording sheet.

IT 123809-91-6
 (photopolymer. initiator, IR-sensitive thermal recording material containing)

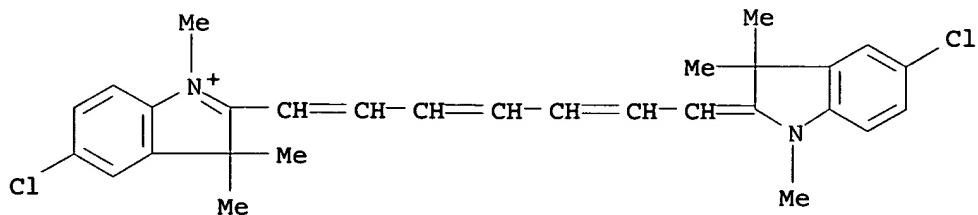
RN 123809-91-6 HCPLUS

CN 3H-Indolium, 5-chloro-2-[7-(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

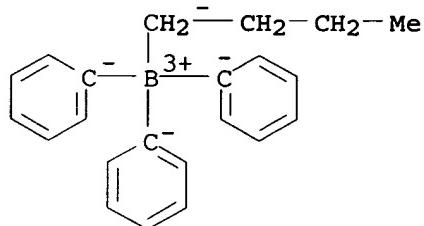
CRN 95415-19-3

CMF C29 H31 Cl2 N2



CM 2

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



IC ICM B41M005-26
 ICS B41M005-30
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 IT Printing, nonimpact
 (thermal, IR-sensitive, materials for, containing near IR-absorbing polymerization initiator)
 IT 123809-91-6
 (photopolymn. initiator, IR-sensitive thermal recording material containing)
 IT 143129-14-0, 3-Chloro-4-hydroxybenzoic acid 6-methacryloyloxyhexyl ester 149431-93-6, 2-Chloro-4-(6-methacryloyloxyhexylsulfonyl)phenol
 (polymerizable electron-accepting compound, IR-sensitive thermal recording material using)

L36 ANSWER 49 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:120748 HCAPLUS
 DOCUMENT NUMBER: 120:120748
 TITLE: Photopolymerizable composition
 INVENTOR(S): Nagasaki, Hideki; Ohta, Katsuko
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
 SOURCE: Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.

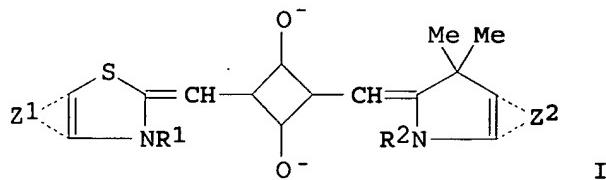
KIND DATE

APPLICATION NO.

DATE

EP 557555	A1	19930901	EP 1992-103292	1992 0226
EP 557555	B1	19950920		
R: DE, FR, GB, NL				
JP 04031863	A2	19920204	JP 1990-138771	1990 0529
JP 2881966	B2	19990412		
RITY APPLN. INFO.:			JP 1990-138771	
				1990 0529

OTHER SOURCE(S) : MARPAT 120:120748
GI



AB The title composition comprises an addition **polymerizable** monomer and a photopolymer. initiator system where the initiator system comprises a squarylium compound I [R₁, R₂ = alkyl, aryl; Z₁, Z₂ = benzene or naphthalene ring] and a s-triazine compound having ≥ 1 halogenated Me group. The initiator system provides improved solubility and spectral sensitivity.

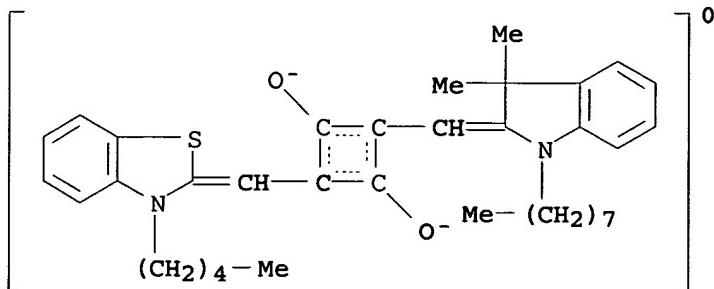
IT 145128-44-5 145128-45-6 145128-46-7

145128-47-8

(photoinitiator system containing)

RN 145128-44-5 HCAPLUS

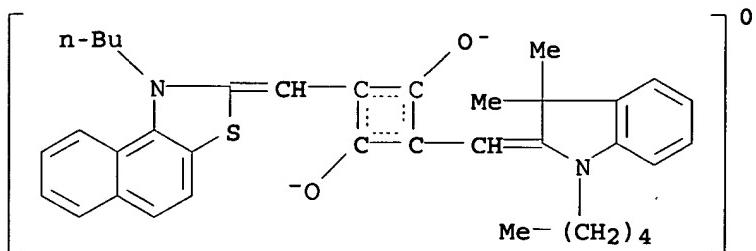
CN Cyclobutenediylium, 1-[(1,3-dihydro-3,3-dimethyl-1-octyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-3-[(3-pentyl-2(3H)-benzothiazolylidene)methyl]-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 145128-45-6 HCAPLUS

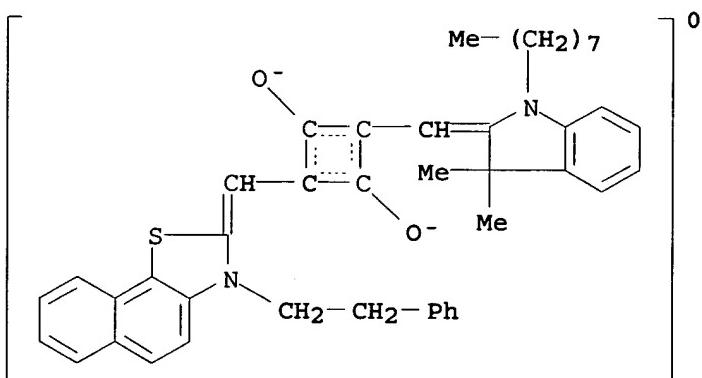
CN Cyclobutenediylium, 1-[(1-butylnaptho[1,2-d]thiazol-2(1H)-

ylidene)methyl]-3-[(1,3-dihydro-3,3-dimethyl-1-pentyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-, bis(inner salt) (9CI) (CA INDEX NAME)



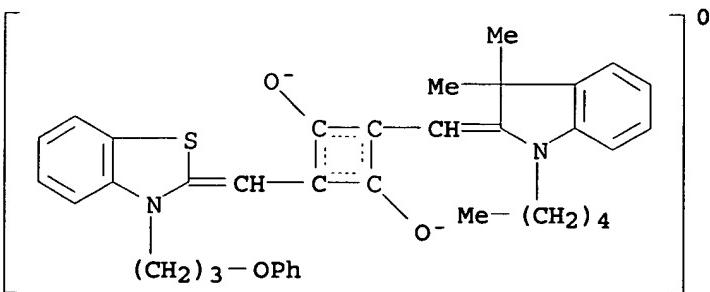
RN 145128-46-7 HCPLUS

CN Cyclobutenediylium, 1-[(1,3-dihydro-3,3-dimethyl-1-octyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-3-[(3-(2-phenylethyl)naphtho[2,1-d]thiazol-2(3H)-ylidene)methyl]-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 145128-47-8 HCPLUS

CN Cyclobutenediylium, 1-[(1,3-dihydro-3,3-dimethyl-1-pentyl-2H-indol-2-ylidene)methyl]-2,4-dihydroxy-3-[(3-(3-phenoxypropyl)-2(3H)-benzothiazolylidene)methyl]-, bis(inner salt) (9CI) (CA INDEX NAME)



IC ICM C08F002-50

CC ICS G03F007-029
 CC 74-4 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35
 IT Polymerization catalysts
 (photochem., containing squarylium compds. and halogenated Me
 s-triazines)
 IT 949-42-8 5516-47-2 6542-67-2, 2,4,6-Tris(trichloromethyl)-s-
 triazine 24504-22-1 24687-55-6, 2,4,6-Tris(tribromomethyl)-s-
 triazine 145128-44-5 145128-45-6
 145128-46-7 145128-47-8
 (photoinitiator system containing)

L36 ANSWER 50 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1994:42039 HCAPLUS
 DOCUMENT NUMBER: 120:42039
 TITLE: Volume holographic film, manufacture thereof,
 and window using same
 INVENTOR(S): Koorishima, Tomonori; Tanabe, Yuzuru
 PATENT ASSIGNEE(S): Asahi Glass Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 05046061	A2	19930226	JP 1991-233859	1991 0821
PRIORITY APPLN. INFO.:			JP 1991-233859	1991 0821

AB A volume holog. film, which has a layered structure with cyclically changing refractive indexes, is patterned and hardened by interference between 2 light beams having the same phase focused on the film, which comprises a radical polymerization photoinitiator made of a quaternary ammonium anion and a borate cation and a polymerizable organic compound as essential components. The manufacture of the holog. film is claimed. The title window uses a volume holog. film capable of reflecting IR light and transmitting visible light.

IT 141714-60-5
 (radical polymerization photoinitiator,
 manufacture of volume holog. film using)

RN 141714-60-5 HCAPLUS

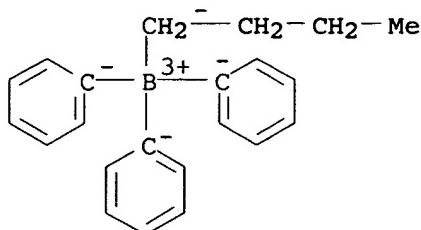
CN Quinolinium, 1-ethyl-2-[7-(1-ethyl-2(1H)-quinolinylidene)-1,3,5-heptatrienyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

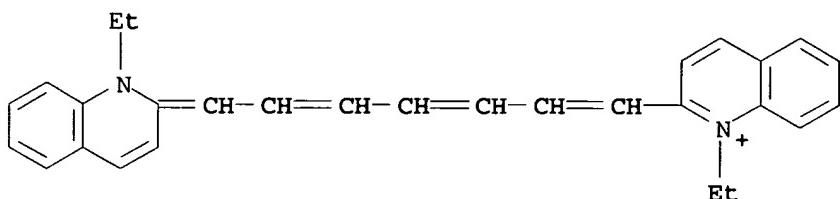
CRN 47252-39-1

CMF C22 H24 B

CCI CCS



CM 2

CRN 37069-61-7
CMF C29 H29 N2

IC ICM G03H001-02
 ICS G03F007-004; G03F007-027; G03F007-029; G03F007-031
 CC 74-8 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 ST vol holog film polymn compn; interference pattern
 polymn compn hardening; window vol holog film
 IT 141714-60-5
 (radical polymerization photoinitiator,
 manufacture of volume holog. film using)

L36 ANSWER 51 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1994:42038 HCPLUS
 DOCUMENT NUMBER: 120:42038
 TITLE: Volume holographic film, manufacture thereof,
 and window using same
 INVENTOR(S): Koorishima, Tomonori
 PATENT ASSIGNEE(S): Asahi Glass Co Ltd, Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 05046060	A2	19930226	JP 1991-233858	1991 0821
PRIORITY APPLN. INFO.:			JP 1991-233858	1991

0821

AB A volume holog. film, which has a layered structure with cyclically changing refractive indexes, is patterned and hardened by interference between 2 light beams having the same phase focused on the film, which comprises a radical polymerization photoinitiator made of a quaternary ammonium anion and a borate cation, a polymerizable organic compound, and a liquid crystal as essential components. The manufacture of the holog. film is claimed. A window using the volume holog. film is also claimed.

IT 141714-60-5
 (radical polymerization photoinitiator,
 manufacture of volume holog. film using)

RN 141714-60-5 HCPLUS

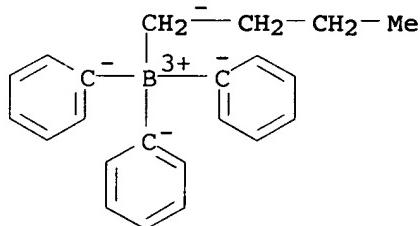
CN Quinolinium, 1-ethyl-2-[7-(1-ethyl-2(1H)-quinolinylidene)-1,3,5-heptatrienyl]-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 47252-39-1

CMF C22 H24 B

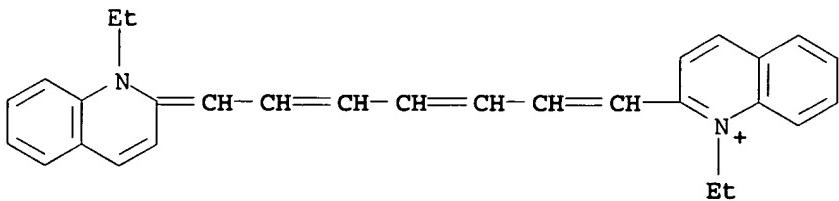
CCI CCS



CM 2

CRN 37069-61-7

CMF C29 H29 N2



IC ICM G03H001-02
 ICS G03F007-004; G03F007-027; G03F007-029; G03F007-031

CC 74-8 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

ST vol holog film polymn compn; interference pattern polymn compn hardening; window vol holog film

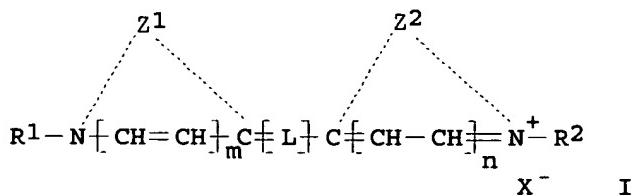
IT 141714-60-5
 (radical polymerization photoinitiator,

manufacture of volume holog. film using)

L36 ANSWER 52 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:623091 HCPLUS
 DOCUMENT NUMBER: 117:223091
 TITLE: Photopolymerizable composition
 INVENTOR(S): Nagasaka, Hideki; Ota, Katsuko
 PATENT ASSIGNEE(S): Mitsubishi Kasei Corp., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04031863	A2	19920204	JP 1990-138771	1990 0529
JP 2881966	B2	19990412		
US 5219709	A	19930615	US 1992-841495	1992 0226
EP 557555	A1	19930901	EP 1992-103292	1992 0226
EP 557555 R: DE, FR, GB, NL	B1	19950920		
PRIORITY APPLN. INFO.:			JP 1990-138771	1990 0529

OTHER SOURCE(S): MARPAT 117:223091
 GI

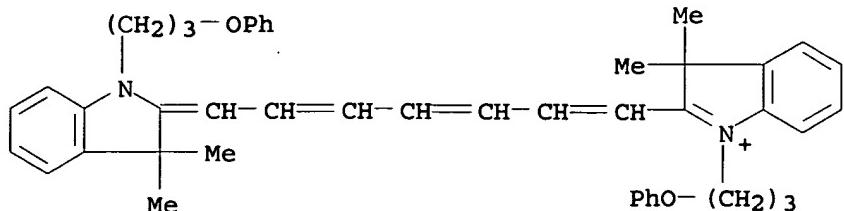


AB A photopolymerizable composition containing an ethylenic unsatd. compound and photopolymn. initiators is characterized by the photopolymn. initiators, which are made up of a cyanine dye I [R1,2 = alkyl; R1 and/or R2 is alkyl substituted with aryl, aryloxy, alkoxy, acyloxy, carboalkoxy, carboaryloxy; m, n = 0, 1; Z1,2 = atomic group forming heterocycl; X- = anion pair; L = mono-, tri-, penta-, or hepta-butynel] and a s-triazine compound containing ≥ 1 halogenated Me.

IT 144207-13-6 144230-80-8
 (photoinitiator, photopolymerizable composition containing)

RN 144207-13-6 HCAPLUS

CN 3H-Indolium, 2-[7-[1,3-dihydro-3,3-dimethyl-1-(3-phenoxypropyl)-2H-indol-2-ylidene]-1,3,5-heptatrienyl]-3,3-dimethyl-1-(3-phenoxypropyl)-, bromide (9CI) (CA INDEX NAME)

● Br⁻

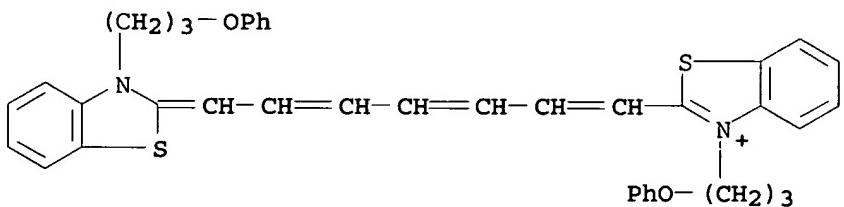
RN 144230-80-8 HCAPLUS

CN Benzothiazolium, 3-(3-phenoxypropyl)-2-[7-[3-(3-phenoxypropyl)-2(3H)-benzothiazolylidene]-1,3,5-heptatrienyl]-, 2-naphthalenesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 144230-79-5

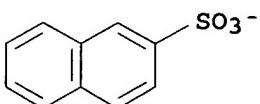
CMF C39 H37 N2 O2 S2



CM 2

CRN 16023-36-2

CMF C10 H7 O3 S



IC ICM G03F007-031

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Polymerization catalysts

(photochem., cyanine dye and s-triazine compound as)

IT 949-42-8 3599-76-6 3712-60-5 5516-51-8 24687-55-6,
2,4,6-Tris(tribromomethyl)-s-triazine 144206-98-4 144207-00-1

144207-02-3 144207-04-5 144207-06-7 144207-08-9
 144207-10-3 144207-12-5 144207-13-6 144230-77-3
 144230-78-4 144230-80-8 144248-81-7

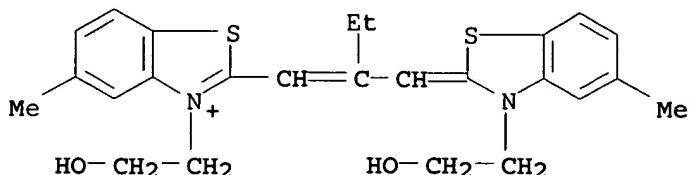
(photoinitiator, photopolymerizable composition containing)

L36 ANSWER 53 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1992:107009 HCAPLUS
 DOCUMENT NUMBER: 116:107009
 TITLE: Organic dye-based photopolymerization initiators
 INVENTOR(S): Ito, Hiromitsu; Taguchi, Takao; Imai, Yukiya;
 Morimitsu, Yoshinori; Iino, Ryoichi
 PATENT ASSIGNEE(S): Toppan Printing Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 03109402	A2	19910509	JP 1989-247607	1989 0922
PRIORITY APPLN. INFO.:			JP 1989-247607	1989 0922

- AB The title initiators showing high sensitivity to UV, visible ray, and Ar laser contain compds. prepared by crosslinking organic peroxides and organic dyes having NH₂, monoalkylamino, imino, CO₂H, haloalkyl, or OH group using R₁(CH₂)_nR₂ (R₁₋₂ = NH₂, monoalkylamino, CO₂H, OH, haloalkyl; n = 1-5). Thus, a solution of 3,4'-dicarboxy-3',4'-bis(tert-butylperoxycarbonyl)benzophenone in benzene was added dropwise to a solution of 1-hydroxypropionic acid and 4-piperidinopyridine in benzene and the mixture was treated with 7-amino-4-trifluoromethylcoumarin at room temperature for 5 h to give a photoinitiator (I). Then, an Al sheet was coated with a mixture of 2-ethylhexyl acrylate-methacrylic acid-Me methacrylate copolymer 100, pentaerythritol triacrylate 40, MEK 1100, and I 10 parts, dried at 70° for 2 min, overcoated with aqueous poly(vinyl alc.), and dried to give a test piece showing sensitivity to light (488 nm) of 0.3 mJ/cm².
- IT 23216-84-4DP, reaction products with peroxides and crosslinking agents
 (preparation of, as visible light- and laser-sensitive photoinitiator)
- RN 23216-84-4 HCAPLUS
- CN Benzothiazolium, 3-(2-hydroxyethyl)-2-[2-[[3-(2-hydroxyethyl)-5-methyl-2(3H)-benzothiazolylidene]methyl]-1-butenyl]-5-methyl-, bromide (9CI) (CA INDEX NAME)

● Br⁻

IC ICM C08F002-50
 ICS G03F007-031

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 41

ST dye deriv photopolymn initiator; peroxide dye photopolymn initiator; laser sensitive polymn initiator; visible light sensitive polymn initiator; acrylic polymer photocurable

IT Polymerization catalysts

(photochem., peroxides, dye-based, preparation of, with high sensitivity to visible light and laser)

IT 50-21-5DP, reaction products with dyes and peroxides 56-41-7DP,
 L-Alanine, reaction products with dyes and peroxides 79-14-1DP,
 reaction products with dyes and peroxides 107-15-3DP,
 1,2-Diaminoethane, reaction products with dyes and peroxides 107-21-1DP, 1,2-Ethanediol, reaction products with dyes and peroxides 110-94-1DP, Glutaric acid, reaction products with dyes and peroxides 760-78-1DP, DL-Norvaline, reaction products with dyes and peroxides 23216-84-4DP, reaction products with peroxides and crosslinking agents 53518-15-3DP,
 7-Amino-4-trifluoromethylcoumarin, reaction products with peroxides and crosslinking agents 55804-70-1DP, reaction products with peroxides and crosslinking agents 70281-87-7DP,
 reaction products with peroxides and crosslinking agents 90164-26-4DP, reaction products with peroxides and crosslinking agents 93795-06-3DP, reaction products with dyes and crosslinking agents 103353-81-7DP, reaction products with dyes and crosslinking agents 139189-36-9DP, reaction products with dyes and crosslinking agents 139189-37-0DP, reaction products with peroxides and crosslinking agents 139189-41-6DP, reaction products with peroxides and crosslinking agents 139441-79-5DP,
 reaction products with peroxides and crosslinking agents (preparation of, as visible light- and laser-sensitive photoinitiator)

L36 ANSWER 54 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:91961 HCPLUS

DOCUMENT NUMBER: 114:91961

TITLE: Photohardenable composition containing complex salt photoinitiator for imaging system

INVENTOR(S): Gottschalk, Peter; Skaggs, Lisa M.

PATENT ASSIGNEE(S): Mead Corp., USA

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

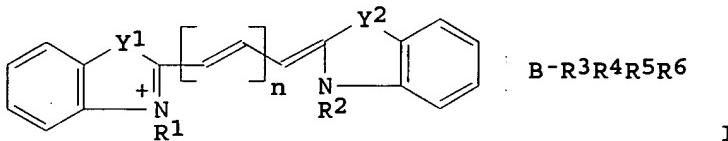
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 390439	A1	19901003	EP 1990-303141	1990 0323
R: CH, DE, FR, GB, LI JP 03020260	A2	19910129	JP 1990-78583	1990 0327
PRIORITY APPLN. INFO.:			US 1989-328669	A 1989 0327

OTHER SOURCE(S): MARPAT 114:91961
GI

AB A photohardenable composition which is preferably microencapsulated and used in a panchromatic imaging system comprises a free-radical-polymerizable or crosslinkable monomer and a photoinitiator represented by the general formula I (Y₁, Y₂ = O, S, Se, vinyl, CMe₂, or NR₇; R₁, R₂ = alkyl; R₃₋₆ = alkyl, aralkyl, alkaryl, alkenyl, alkynyl, alicyclic, allyl, or allyl; R₇ = short-chain alkyl; n = 0-3). The photoinitiator I exhibits good solubility in common monomers and provides the photohardenable composition with improved photospeed.

IT 123051-21-8
(photoinitiator, for photohardenable compns. for microencapsulated photoimaging materials)

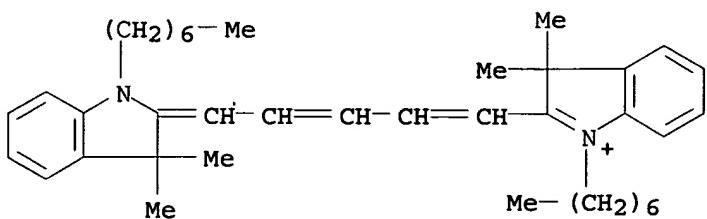
RN 123051-21-8 HCPLUS

CN 3H-Indolium, 1-heptyl-2-[5-(1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

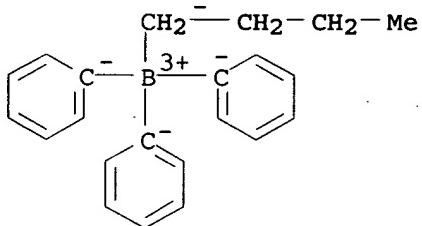
CRN 123022-20-8

CMF C39 H55 N2



CM 2

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



IC ICM C08F002-50
 ICS G03C001-73; G03F007-029
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 IT 123051-21-8 131898-27-6 132014-11-0
 (photoinitiator, for photohardenable compns. for microencapsulated photoimaging materials)

L36 ANSWER 55 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:523869 HCAPLUS
 DOCUMENT NUMBER: 113:123869
 TITLE: Light-sensitive compositions
 INVENTOR(S): Kawamura, Kouichi; Matsumoto, Hirotaka;
 Yamaguchi, Jun
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Ger. Offen., 35 pp.
 CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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DE 3926666	A1	19900215	DE 1989-3926666	1989
				0811
DE 3926666	C2	19980604		
DE 3926666	C5	20050721		

JP 02048665

A2 19900219

JP 1988-200606

1988
0811JP 08020734
US 4997745B4 19960304
A 19910305

US 1989-394383

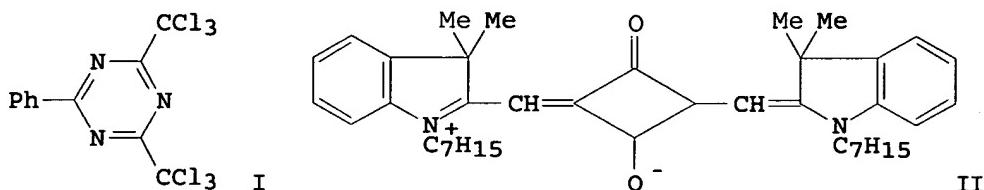
1989
0811

PRIORITY APPLN. INFO.:

JP 1988-200606

A
1988
0811OTHER SOURCE(S):
GI

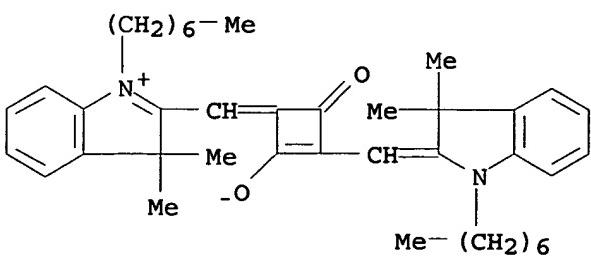
MARPAT 113:123869



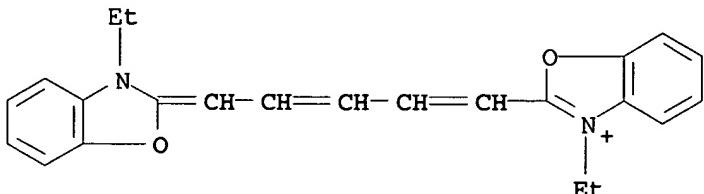
AB Light-sensitive compns. containing a trihalomethyl-s-triazine and a dye photosensitizer having a reduction potential that is not more than 0.10 V higher than the reduction potential of the trihalomethyl-s-triazine are used in photopolymerizable photoimaging compns. for the production of lithog. plates, printing plates, resist patterns, photomasks, or the like. The compns. are sensitive in the visible and near-IR regions and are stable. Thus, a PET support was overcoated with a composition containing pentaerythritol tetraacrylate, a benzyl acrylate-methacrylic acid copolymer, I, II (photosensitizer), CH₂Cl₂, and MeCOEt, dried, imagewise exposed through a step tablet, and developed to show 6 steps.

IT 129300-92-1

(photoinitiator compns. containing dye sensitizer and, for photopolymer photoimaging compns.)

RN 129300-92-1 HCPLUS**CN** 3H-Indolium, 1-heptyl-2-[[3-[(1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)methyl]-2-hydroxy-4-oxo-2-cyclobuten-1-ylidene]methyl]-3,3-dimethyl-, inner salt (9CI) (CA INDEX NAME)

IT 14806-50-9
 (photoinitiator compns. containing trihalomethyltriazine and, for photopolymer photoimaging compns.)
 RN 14806-50-9 HCPLUS
 CN Benzoxazolium, 3-ethyl-2-[5-(3-ethyl-2(3H)-benzoxazolylidene)-1,3-pentadienyl]-, iodide (9CI) (CA INDEX NAME)

● I⁻

IC ICM G03F007-004
 ICS C08F002-50
 ICA C09B023-00; C09B015-00; C09B057-02
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST light sensitive compn photopolymer photoimaging;
 trihalomethyltriazine light sensitive compn
 photoimaging; dye light sensitive compn photoimaging;
 cyanine dye light sensitive photoimaging; triazine trihalomethyl
 light sensitive photoimaging
 IT Lithographic plates
 Photomasks
 Printing plates
 (photopolymerizable compns. for fabrication of,
 photoinitiator compns. for)
 IT Resists
 (photo-, photoinitiator compns. containing
 cyanine dye and trihalomethyltriazine compound for)
 IT Photoimaging compositions and processes
 (photopolymerizable, photoinitiator compns.
 containing cyanine dye and trihalomethyltriazine compound for)
 IT 24504-22-1 125775-49-7 129300-92-1
 (photoinitiator compns. containing dye
 sensitizer and, for photopolymer photoimaging compns
 .)
 IT 905-96-4 985-10-4 14806-50-9 41387-42-2 61877-50-7
 129281-02-3
 (photoinitiator compns. containing
 trihalomethyltriazine and, for photopolymer photoimaging
 compns.)

L36 ANSWER 56 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1990:488252 HCPLUS
 DOCUMENT NUMBER: 113:88252
 TITLE: Photopolymerization initiators and
 photosensitive materials containing them
 INVENTOR(S): Fukui, Tetsuro; Miura, Kyo; Takasu, Yoshio

PATENT ASSIGNEE(S) : Canon K. K., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02004804	A2	19900109	JP 1988-155696	1988 0622
PRIORITY APPLN. INFO.:			JP 1988-155696	1988 0622

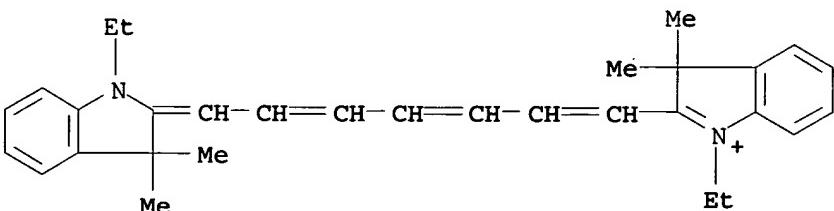
OTHER SOURCE(S) : MARPAT 113:88252

AB Photosensitive materials comprise radical-polymerizable compds. and photopolymn. initiators containing cationic dye sensitizers and borate salts. The initiators show good sensitivity to semiconductor laser radiation and are useful for resists, printing plates, and the like. Thus, treating BuMgBr with Ph₂BCl in THF and stirring the resulting solution with aqueous NaOH gave NaBBu₂Ph₂. Then, a solution containing pentaerythritol triacrylate, poly(Me methacrylate), NaBBu₂Ph₂, AcOEt, malachite green, and dichloroethane was applied on an anodically oxidized Al plate and exposed to a He-Ne laser to show high sensitivity.

IT 17094-17-6, NK 1414
 (sensitizers, photoinitiators containing borate salts
 and, for photosensitive materials)

RN 17094-17-6 HCPLUS

CN 3H-Indolium, 1-ethyl-2-[7-(1-ethyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-3,3-dimethyl-, iodide (9CI)
 (CA INDEX NAME)



● I-

IC ICM C08F002-50
 ICS G03F007-029; G03F007-20
 CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35
 ST polymn initiator cationic dye sensitizer; borate salt
 polymn initiator; photosensitive material borate
 polymn initiator; laser sensitive polymn

initiator borate; photoresist cationic dye borate salt; printing plate photosensitive material
 IT Polymerization catalysts
 (photochem., cationic dyes and borate salts as, for laser-sensitive materials)
 IT 81-88-9 569-64-2, Malachite green 2390-59-2, Ethyl violet 17094-17-6, NK 1414 107893-51-6 124896-12-4 128034-96-8 128603-76-9 128840-18-6 (sensitizers, photoinitiators containing borate salts and, for photosensitive materials)

L36 ANSWER 57 OF 62 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:88310 HCAPLUS
 DOCUMENT NUMBER: 112:88310
 TITLE: Dye-sensitized photographic imaging system
 INVENTOR(S): Farid, Samir Y.; Moody, Roger E.
 PATENT ASSIGNEE(S): Eastman Kodak Co., USA
 SOURCE: U.S., 15 pp.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4859572	A	19890822	US 1988-189002	1988 0502
CA 1335699	A1	19950530	CA 1989-596709	1989 0414
EP 340652	A2	19891108	EP 1989-107728	1989 0428
EP 340652 R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE JP 02013954	A3 A2	19910502 19900118	JP 1989-112301	1989 0502
PRIORITY APPLN. INFO.:			US 1988-189002	A 1988 0502

OTHER SOURCE(S): MARPAT 112:88310

AB A photog. imaging system is described comprising a hardenable organic component containing ethylenic unsatn. sites and an initiator system for ethylenic addition. The initiator system is comprised of an electron acceptor activator, an electron donor activator containing a borate anionic moiety, and, acting as a photosensitizer, a dye capable of absorbing imaging radiation. The dye has a reduction potential related to that of the electron acceptor activator and an oxidation potential related to that of the electron donor activator to permit each to release a free radical upon excitation of the photosensitizer by exposure to actinic radiation.

IT 125318-62-9
 (photoinitiator system containing, for photoimaging process)

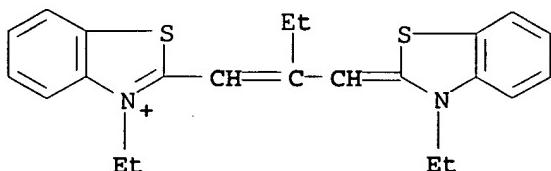
RN 125318-62-9 HCAPLUS

CN Benzothiazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzothiazolylidene)methyl]-1-but enyl]-, salt with trifluoroacetic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 35077-88-4

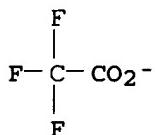
CMF C23 H25 N2 S2



CM 2

CRN 14477-72-6

CMF C2 F3 O2



IC ICM G03C001-68

INCL 430281000

CC 74-4 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT Polymerization catalysts

(photochem., containing electron acceptor and electron donor and sensitizing dye in photoimaging systems)

IT 63123-42-2 120307-06-4 125318-62-9 125318-63-0

(photoinitiator system containing, for photoimaging process)

L36 ANSWER 58 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1990:28150 HCPLUS

DOCUMENT NUMBER: 112:28150

TITLE: Infrared-sensitive photopolymerization compositions for colored photoresists and photoimaging

INVENTOR(S): Yamaguchi, Jun; Shinozaki, Fumiaki; Ishige, Sadao; Adachi, Keiichi; Okazaki, Masaki

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.
CODEN: JKXXAF

DOCUMENT TYPE: Patent
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.

KIND DATE

APPLICATION NO.

DATE

JP 01072150

A2 19890317

JP 1987-228032

1987
0911

PRIORITY APPLN. INFO.:

JP 1987-228032

1987
0911

AB The title compns. comprise ethylenically unsatd. bond-containing **polymerizable** compound, organic cationic colored compound organic B compound anion salt R1R2R3R4B- D+ (D+ = cationic dye; R1-4 = (un)substituted alkyl, aryl, aralkyl, alkaryl, alkenyl, alkynyl, alicyclic, heterocyclic, or allyl group or ≥2 of R1-4 may be ring member sensitive to light of >750 nm wavelength and a dye or pigment sensitive to light of ≤700 nm wavelength.

IT 123809-91-6

(photoinitiators, for IR-sensitive colored photoresists and photoimaging compns.)

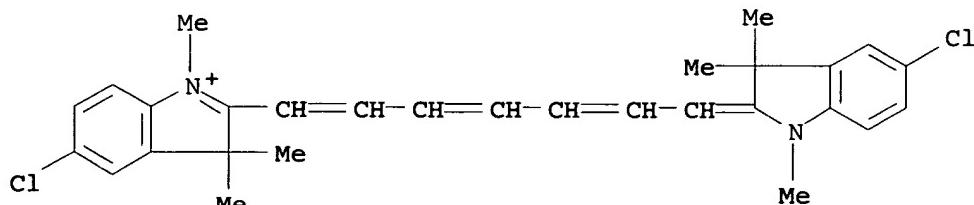
RN 123809-91-6 HCPLUS

CN 3H-Indolium, 5-chloro-2-[7-(5-chloro-1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 95415-19-3

CMF C29 H31 Cl2 N2

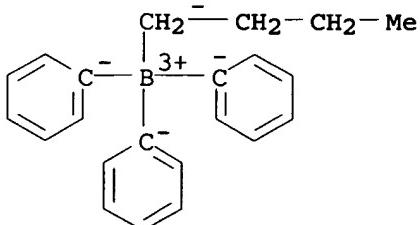


CM 2

CRN 47252-39-1

CMF C22 H24 B

CCI CCS



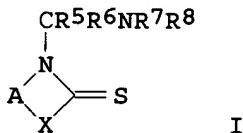
IC ICM G03C001-68

ICS G03C001-00
 ICA C08F002-50; G03C005-16
 CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 Section cross-reference(s): 35
 IT 123809-91-6
 (photoinitiators, for IR-sensitive colored photoresists and photoimaging compns.)

L36 ANSWER 59 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 1989:564270 HCPLUS
 DOCUMENT NUMBER: 111:164270
 TITLE: High-sensitivity, spectrally sensitized photopolymerizable compositions
 INVENTOR(S): Yamaguchi, Jun; Washisu, Shintaro
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01017048	A2	19890120	JP 1987-172435	
				1987
				0710
PRIORITY APPLN. INFO.:			JP 1987-172435	
				1987
				0710

GI



AB The title compns. useful in laser-sensitive lithog. plates, photoresists, photomask, and image-forming microcapsules comprise ethylenically unsatd. polymerizable compds., organic cationic color compds. in the form of organoboron anion salt R1R2R3R4B-- D+ and cis group-containing compds. I (D = cationic color compound; R1, R2, R3, R4 = alkyl, aryl, aralkyl, alkaryl, alkenyl, alkynyl, alicyclic, heterocyclic, allyl, or their derivative group; ≥2 of R1-4 may be bonded together to form a ring; X = NR, O, S, C; R = H, C1-4 alkyl; A = member of mono- or polynuclear rings; R5, R6 = H, alkyl, aryl; R7, R8 = H, alkyl, aralkyl, or may form pyridine, piperidine, morpholine, or n-substituted piperazine ring with the N.

IT 121431-64-9 123051-21-8
 (photoinitiators, for photoimaging compns., sensitizers for)

RN 121431-64-9 HCPLUS

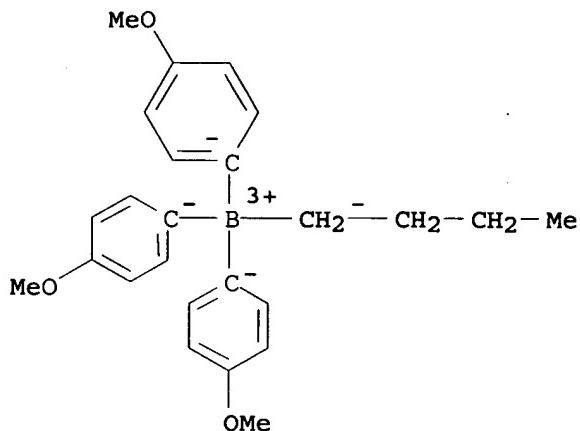
CN 3H-Indolium, 2-[7-(1,3-dihydro-1,3,3-trimethyl-2H-indol-2-ylidene)-1,3,5-heptatrienyl]-1,3,3-trimethyl-, (T-4)-butyltris(4-methoxyphenyl)borate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 121431-62-7

CMF C25 H30 B O3

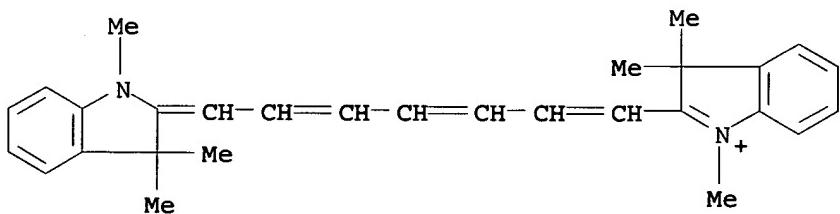
CCI CCS



CM 2

CRN 47676-39-1

CMF C29 H33 N2



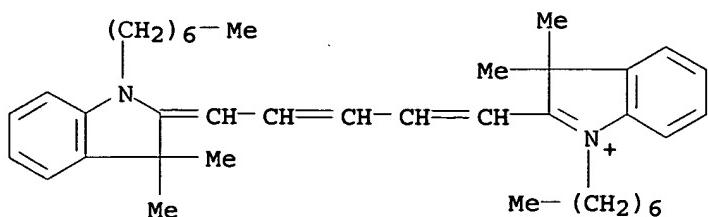
RN 123051-21-8 HCAPLUS

CN 3H-Indolium, 1-heptyl-2-[5-(1-heptyl-1,3-dihydro-3,3-dimethyl-2H-indol-2-ylidene)-1,3-pentadienyl]-3,3-dimethyl-, (T-4)-butyltriphenylborate(1-) (9CI) (CA INDEX NAME)

CM 1

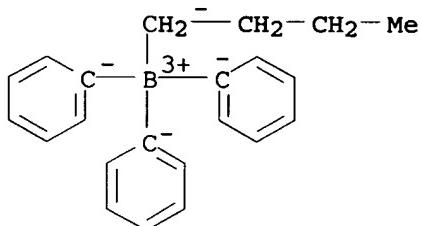
CRN 123022-20-8

CMF C39 H55 N2



CM 2

CRN 47252-39-1
 CMF C22 H24 B
 CCI CCS



- IC ICM G03C001-68
 ICS C08K005-43; C08K005-55; C09D011-10; G03C001-00; G03C005-16
 CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
 ST photopolymerizable compn lithog plate;
 spectrally sensitized photoresist; photomask spectrally sensitized;
 photoimaging compn spectrally sensitized;
 laser sensitive polymerizable compn
 IT Lithographic plates
 (manufacture of, photoinitiators and sensitizers in)
 IT Photoimaging compositions and processes
 (polymeric, photoinitiators and sensitizers
 for)
 IT Resists
 (photo-, photoinitiators and sensitizers for)
 IT Polymerization catalysts
 (photochem., cyanine borates, for acrylic compds., for
 photoimaging compns.)
 IT 4986-89-4, Pentaerythritol tetraacrylate 65697-21-4,
 Benzylmethacrylate-methacrylic acid copolymer
 (photoimaging compns. containing, for initiators and
 sensitizers for)
 IT 117522-03-9 121431-64-9 123051-21-8
 (photoinitiators, for photoimaging compns.,
 sensitizers for)
 IT 2160-15-8 6957-11-5
 (sensitizers, for photoimaging compns.)

DOCUMENT NUMBER: 102:140898
 TITLE: Perester compounds
 INVENTOR(S): Wade, John Robert; Potts, Rodney Martin;
 Pratt, Michael John
 PATENT ASSIGNEE(S): Vickers PLC, UK
 SOURCE: Eur. Pat. Appl., 49 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 125875	A2	19841121	EP 1984-303110	1984 0509
EP 125875	A3	19850130		
EP 125875	B1	19880810		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE FI 8401825	A	19841110	FI 1984-1825	1984 0507
DK 8402276	A	19841110	DK 1984-2276	1984 0508
ZA 8403469	A	19841224	ZA 1984-3469	1984 0508
ZA 8403468	A	19851030	ZA 1984-3468	1984 0508
CA 1252782	A1	19890418	CA 1984-453805	1984 0508
NO 8401870	A	19841112	NO 1984-1870	1984 0509
NO 169227	B	19920217		
NO 169227	C	19920527		
AU 8427837	A1	19841115	AU 1984-27837	1984 0509
AU 574361	B2	19880707		
ES 532352	A1	19860601	ES 1984-532352	1984 0509
AT 36317	E	19880815	AT 1984-303110	1984 0509
US 4946960	A	19900807	US 1987-107889	1987 1009
US 5130227	A	19920714	US 1989-418758	1989 1005
US 5286603	A	19940215	US 1992-894002	1992 0603

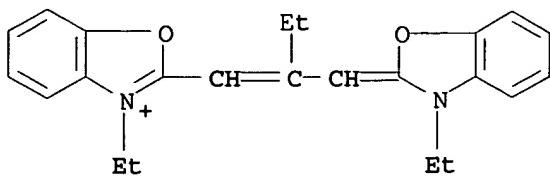
PRIORITY APPLN. INFO.:	GB 1983-12721	A	1983 0509
	GB 1983-12722	A	1983 0509
	US 1984-607774	B1	1984 0507
	US 1984-607776	B1	1984 0507
	EP 1984-303110	A	1984 0509
	US 1985-814523	B1	1985 1219
	US 1986-902046	B1	1986 0826
	US 1986-946674	B1	1986 1231
	US 1988-191831	B1	1988 0509
	US 1989-418758	A3	1989 1005

AB A photopolymeric composition suitable for lithog. plate fabrication contains a perester compound suitable to cause polymerization of an addition polymerizable compound on exposure to radiation. Thus, an Al support was coated with a composition containing the dimethacrylate ester of the diglycidyl ether of Bisphenol A 3, vinyl acetate-crotonic acid copolymer 1, 4-(2',4',6'-trimethylbenzoyl)-tert-Bu perbenzoate 0.15, and Et Michler's ketone 0.15 weight parts, dried, overcoated with poly(vinyl alc.), imagewise exposed, and developed with an aqueous solution containing Na propanoate, Na benzoate, and a surfactant to give a lithog. plate.

IT 1054-00-8
(photopolymer composition for lithog. plate fabrication containing, perester photoinitiators for)

RN 1054-00-8 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, iodide (9CI) (CA INDEX NAME)



● I-

IC C07C179-18; C07C179-20; C07D277-64; C07D277-84; C07D335-16;
C07D209-22; C07D293-12; C07D215-14; C07D417-06; C07D455-04

ICA G03C001-68

CC 74-5 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)ST lithog plate photopolymer compn perester;
photoinitiator perester photopolymer lithog
plateIT Lithographic plates
(photopolymer composition for preparation of, perester
photoinitiators for)IT Photoimaging compositions and processes
(photopolymer, perester photoinitiators for)IT Polymerization catalysts
(photochem., perester compds. as)

IT	89836-56-6	94610-26-1	94610-27-2	94610-28-3	94610-29-4
	94610-30-7	94610-32-9	94610-33-0	94610-34-1	94610-35-2
	94610-36-3	94610-37-4	94610-38-5	94610-39-6	94610-40-9
	94610-41-0	94610-42-1	94610-43-2	94610-44-3	94610-45-4
	94610-46-5	94610-47-6	94610-48-7	94610-49-8	94610-50-1
	94610-51-2	94610-52-3	94610-53-4	94610-54-5	94610-55-6
	94610-56-7	94610-57-8	94610-58-9	94610-59-0	94610-60-3
	94610-61-4	94610-62-5	94610-63-6	94610-70-5	94610-71-6
	94610-72-7	94610-73-8	94610-74-9	94630-61-2	94630-62-3
	94630-63-4	94630-64-5	94630-65-6	94630-66-7	94630-67-8
	94630-68-9	94630-69-0	94630-70-3	94630-71-4	94630-72-5
	94630-73-6	94630-74-7	94630-75-8	94630-76-9	94630-77-0
	94630-78-1	94630-79-2	94630-80-5	94630-81-6	94630-82-7
	94630-83-8	94630-84-9	94630-85-0	94630-86-1	94630-87-2
	94630-88-3	94630-89-4	94630-90-7	94630-91-8	94630-92-9
	94630-93-0	94630-94-1	94630-95-2	94630-96-3	94630-97-4
	94630-98-5	94630-99-6	95205-05-3	95205-06-4	95205-07-5
	95205-08-6	95205-09-7	95205-10-0	95205-11-1	

(photopolymer composition for lithog. plate
fabrication containing, as initiator)

IT	90-93-7	91-44-1	905-96-4	1042-84-8	1054-00-8
	1565-94-2	5950-99-2	14934-37-3	25609-89-6	63226-13-1
	71616-78-9	79586-49-5	80601-02-1	84170-75-2	95205-12-2

(photopolymer composition for lithog. plate
fabrication containing, perester photoinitiators for)

L36 ANSWER 61 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1985:70278 HCPLUS

DOCUMENT NUMBER: 102:70278

TITLE: Radiation sensitive plates

INVENTOR(S): Wade, John Robert; Potts, Rodney Martin;
Pratt, Michael John

PATENT ASSIGNEE(S) : Vickers PLC, UK
 SOURCE: Eur. Pat. Appl., 49 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 125140	A2	19841114	EP 1984-303111	1984 0509
EP 125140	A3	19850306		
EP 125140	B1	19881214		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE				
FI 8401826	A	19841110	FI 1984-1826	1984 0507
FI 81916	B	19900831		
FI 81916	C	19901210		
DK 8402277	A	19841110	DK 1984-2277	1984 0508
DK 162468	B	19911028		
DK 162468	C	19920323		
CA 1259219	A1	19890912	CA 1984-453804	1984 0508
NO 8401869	A	19841112	NO 1984-1869	1984 0509
NO 169313	B	19920224		
NO 169313	C	19920603		
AU 8427838	A1	19841115	AU 1984-27838	1984 0509
AU 581406	B2	19890223		
ES 532351	A1	19860616	ES 1984-532351	1984 0509
AT 39295	E	19881215	AT 1984-303111	1984 0509
US 4946960	A	19900807	US 1987-107889	1987 1009
US 5130227	A	19920714	US 1989-418758	1989 1005
US 5286603	A	19940215	US 1992-894002	1992 0603
PRIORITY APPLN. INFO.:			GB 1983-12721	A 1983 0509
			GB 1983-12722	A 1983

0509

US 1984-607774 B1
 1984
 0507

US 1984-607776 B1
 1984
 0507

EP 1984-303111 A
 1984
 0509

US 1985-814523 B1
 1985
 1219

US 1986-902046 B1
 1986
 0826

US 1986-946674 B1
 1986
 1231

US 1988-191831 B1
 1988
 0509

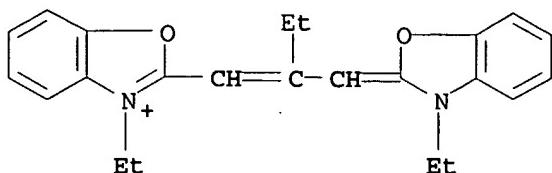
US 1989-418758 A3
 1989
 1005

AB A photosensitive composition for lithog. plate fabrication contains an ethylenically unsatd. polymerizable compound, a perester photoinitiator and optionally an optical sensitizer. Thus, a grained and anodized Al plate was coated with a composition containing dimethacrylate ester of diglycidyl ether of bisphenol A 3, vinyl acetate-crotonic acid polymer 1, 4-(1'-methoxybenzoyl)-tert-Bu perbenzoate 0.15, Et Michler's Ketone 0.15 weight part in EtCOMe at a coating weight 1 g/m², dried, overcoated with a poly(vinyl alc.), imagewise exposed, and developed with an aqueous solution containing Na propanoate, Na benzoate and a surfactant to give a lithog. plate.

IT 1054-00-8
 (photopolymeric imaging composition for lithog. plates fabrication containing, perester photoinitiators for)

RN 1054-00-8 HCAPLUS

CN Benzoxazolium, 3-ethyl-2-[2-[(3-ethyl-2(3H)-benzoxazolylidene)methyl]-1-butenyl]-, iodide (9CI) (CA INDEX NAME)



● I-

IC G03C001-68; G03F007-10; G03C001-94; C07C179-18; C07C179-20;

C07C179-22; C08L033-08; C08L033-10; C08F002-50

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)ST photopolymer compon perester photoinitiator
lithog

IT Lithographic plates

(photopolymeric imaging composition for preparation of, containing
perester photoinitiator)

IT	71616-77-8	71616-78-9	71616-79-0	89836-56-6	94610-26-1
	94610-27-2	94610-28-3	94610-29-4	94610-30-7	94610-31-8
	94610-32-9	94610-33-0	94610-34-1	94610-35-2	94610-36-3
	94610-37-4	94610-38-5	94610-39-6	94610-40-9	94610-41-0
	94610-42-1	94610-43-2	94610-44-3	94610-45-4	94610-46-5
	94610-47-6	94610-48-7	94610-49-8	94610-50-1	94610-51-2
	94610-52-3	94610-53-4	94610-54-5	94610-55-6	94610-56-7
	94610-57-8	94610-58-9	94610-59-0	94610-60-3	94610-61-4
	94610-62-5	94610-63-6	94610-64-7	94610-65-8	94610-66-9
	94610-67-0	94610-68-1	94610-69-2	94610-70-5	94610-71-6
	94610-72-7	94610-73-8	94610-74-9	94630-61-2	94630-62-3
	94630-63-4	94630-64-5	94630-65-6	94630-66-7	94630-67-8
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	94630-73-6	94630-74-7	94630-75-8	94630-76-9	94630-77-0
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	94630-83-8	94630-84-9	94630-85-0	94630-86-1	94630-87-2
	94630-88-3	94630-89-4	94630-90-7	94630-91-8	94630-92-9
	94630-93-0	94630-94-1	94630-95-2	94630-96-3	94630-97-4
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(photopolymeric imaging composition for lithog.
plates fabrication containing)

IT	90-93-7	91-44-1	905-96-4	1042-84-8	1054-00-8
	1565-94-2	14934-37-3	25609-89-6	28705-46-6	31897-47-9
	63226-13-1	79586-49-5	80601-02-1	84170-75-2	

(photopolymeric imaging composition for lithog.
plates fabrication containing, perester photoinitiators
for)

L36 ANSWER 62 OF 62 HCPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:81538 HCPLUS

DOCUMENT NUMBER: 98:81538

TITLE: Visible light sensitive, thermally developable
imaging systems

INVENTOR(S): Smith, George H.; Olofson, Peter M.

PATENT ASSIGNEE(S): Minnesota Mining and Manufacturing Co., USA

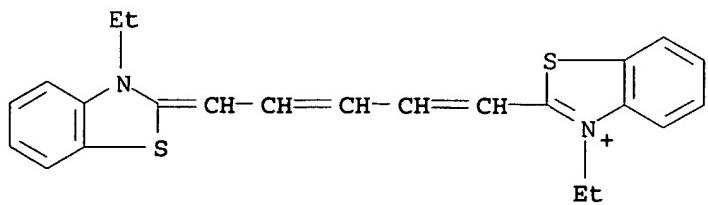
SOURCE: Eur. Pat. Appl., 23 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 61898	A1	19821006	EP 1982-301575	1982 0325
EP 61898 R: AT, CH, DE, FR, GB, IT, NL, SE US 4386154	B1 A	19850619 19830531	US 1981-247834	1981 0326
CA 1174887	A1	19840925	CA 1982-397891	1982 0309
BR 8201701	A	19830216	BR 1982-1701	1982 0325
AT 13951	E	19850715	AT 1982-301575	1982 0325
US 4460677	A	19840717	US 1982-439848	1982 1108
PRIORITY APPLN. INFO.:			US 1981-247834	A 1981 0326
			EP 1982-301575	A 1982 0325

- AB A photothermog. imaging composition comprises a polymeric binder, a leuco dye, a nitrate ion, a sensitizing dye and a photoinitiator selected from a class consisting of diaryliodonium salts or photolabile organic halogen compds. Thus, a poly(ethylene terephthalate) support was coated with a composition containing acrylonitrile-vinylidene chloride copolymer 1.5, MeCOEt 3.5, benzoyl leuco methylene blue 0.09, Mg(NO₃)₂·6H₂O 0.026, trimesic acid 0.004, ascorbic acid 0.004, MeOH 0.9, diphenyliodonium nitrate 0.08, and 5,10-diethoxy-16,17-dimethoxyviolanthrene 0.002 g, dried at 60° for 7 min, imagewise exposed to a 75W W lamp at a distance of 12.7 cm, and developed at 85° for apprx.20 s to give a dense blue color image with optical d. >1.2.
- IT 514-73-8
(photothermog. imaging composition containing leuco dye and nitrate ion and photoinitiator and)
- RN 514-73-8 HCAPLUS
- CN Benzothiazolium, 3-ethyl-2-[5-(3-ethyl-2(3H)-benzothiazolylidene)-1,3-pentadienyl]-, iodide (9CI) (CA INDEX NAME)



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IC G03C001-727

CC 74-7 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 50-81-7, uses and miscellaneous 65-61-2 514-73-8
554-95-0 50721-70-5

(photothermog. imaging composition containing leuco dye and nitrate ion
and photoinitiator and)